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ORIGINAL ARTICLES.

THE USE OF ASCENDING DOSES OF NUX VOMICA, AS AN AID IN THE TREATMENT OF INSUFFICIENCIES OF THE OCULAR MUSCLES.

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In recent years unusual care has been bestowed upon the study of the ocular muscles, and their relation to the production of headache, asthenopia, and reflex nervous disturbances has afforded the subject of many researches. The older tests for the detection of muscular troubles have been believed to be imperfect, and we have for use the ophthalmodynamometer of Landolt, the useful modification of this instrument by Alleman, the phorometer of Stevens, the method of Holden, the obtuse-angled prism of Maddox advocated by Randall, and the ingenious adaptation of Crêtes's revolving prism by Risley for measurement of the degree of discovered deviation. After lack of equilibrium in the ocular muscles has been demonstrated by any or all of these means, the important problem for solution consists in the proper method for the restoration of the disturbed balance.

Here, again, we have a variety of measures at hand, depending upon the degree and character of the defect—decentration of the correcting lenses, the use of prisms, tenotomy, combined or uncombined with advancement, and the method of "graduated" or "partial tenotomies" revived and advocated by Stevens, Ranney, Webster, Standish, and other surgeons. Perfectly aware of the fact that where high degrees of insufficiencies, especially of insufficiency of convergence, exist, surgical treatment is the only one which is efficacious, and also fully alive to the fact that, especially owing to the work of American colleagues, the correction of minor degrees of heterophoria by means of partial tenotomies has become more and more a satisfactory operative procedure, there are none the less a class of cases in which operation is either impossible, from lack of consent, or inadmissible owing to complicating circumstances. It is, perhaps, only necessary to refer to the instances of so-called neurasthenic asthenopia associated with great reduction in the amplitude of convergence, cases in which Landolt has so well shown that surgical treatment, without perhaps being entirely excluded, must be associated

with general invigorating methods. It is in those cases, then, of muscular troubles in which an operation cannot be performed, or, having been performed, has proved insufficient, and in which the use of correcting lenses combined with prisms has failed to relieve the symptoms, that I wish to call attention to the relief that is afforded by the use of ascending doses of nux vomica.

Ophthalmic surgeons have long been accustomed to employ nux vomica or strychnia in the treatment of various forms of ocular disturbance. Since Nagel, in 1871, called attention to the value of strychnia in the treatment of nerve atrophy, it has been largely employed with varying degrees of success in the treatment of atrophy of the optic nerve. Nux vomica has been much used in forms of functional disturbance of the retina, associated with a lack of general bodily tone, in which at once a bitter tonic and stimulant to the trophic centres and a vaso-motor excitant were indicated. Naturally, weakness of the external eye muscles has called for its use, exactly as lack of tone in the general muscular system has always been one of its most important indications. It is not the purpose, therefore, of the cases which follow to show any new use for the drug, but only to describe a method of administration which has proved successful in my hands.

CASE I.—Private patient, female, æt. twenty-one. Painful eyes; supra-orbital neuralgia; violent frontal and occipital headache; general health good; no lesion of the fundus; refraction error a compound hypermetropic astigmatism; insufficiency of the internal recti of seventeen degrees in the act of accommodation, and five degrees at five metres. Correction of the refraction error afforded partial relief, but the headaches returned when any close application with the eyes was practised. Ascending doses of the tincture of nux vomica were begun as follows: Ten drops three times a day, to be increased on succeeding days by one drop at each dose until some physiological action of the drug was manifest.

When the dose had reached twenty-five drops three times a day, eye-tire had greatly lessened. At thirty-five drops three times a day the headaches had ceased, although the occupation of the patient was that of a school-teacher. The remedy was pushed until forty drops were taken three times a day, then gradually decreased to twenty-five drops, and finally discontinued, with the direction to renew the remedy should headaches reappear under the stress of work. The amount of insufficiency varied; the lowest that it reached was ten degrees. Prisms were never used.

CASE II.—Private patient, male, æt. twenty-two. Exceedingly nervous, and the subject of occasional attacks of hepatic congestion; marked asthenopia; pain in the eyeball; frontal and occipital headache; in the fundus of each eye slight retinal haze, otherwise no changes; myopia of one dioptre; insufficiency of the internal recti of eighteen degrees in accommodation and eleven degrees at twenty feet. Adduction three degrees; abduction eleven degrees. Nux vomica, in the method already described, was employed, and under its influence a severe winter of work was successfully undertaken, during which the patient was practically free from headaches, using at the same time three-degree prisms with their bases toward the nose. The prisms alone failed to give relief, but the prisms with the nux vomica were successful.

CASE III.—Private patient, female, æt. nineteen. In good general health, but somewhat mentally depressed owing to domestic troubles; blurred vision during reading; eyes easily tired; severe frontal headache aggravated by all near work. The refraction a simple hypermetropia; insufficiency of the external recti of eight degrees. Correction of the refraction error produced almost entire relief for a number of months, then the headaches returned and were stubbornly present for a long time. Under the use of nux vomica they speedily improved. The maximum dose was thirty-five drops three times a day. The insufficiency through the correcting lenses became as low as three degrees.

CASE IV.—Private patient, female, æt. thirty-four. In poor general health; of gouty ancestry; had recently recovered or partially recovered from pelvic peritonitis; was the subject of the most atrocious occipital headaches occasioned by any use of the eyes. The refraction a compound hypermetropic astigmatism. Insufficiency of the internal recti of twelve degrees. The use of the correcting lenses, together with prisms, afforded some relief, but eye-work instantly brought on the headache. During a period when it became absolutely necessary for the patient to use her eyes at sewing and similar work, ascending doses of nux vomica, while they failed to give the relief recorded in the previous cases, lent sufficient aid to enable the work to be performed. During a similar necessary period of eye-work on another occasion, without the use of nux vomica, the patient had a complete eye-breakdown.

CASE V.—Private patient, male, æt. thirty. In good general health; occasional attacks of blurred vision; some asthenopia, and now and then severe orbital neuralgia. Refraction error a simple astigmatism. Insufficiency of the internal recti from eight to ten degrees. During certain seasons of the year this patient is obliged to perform much night-work, during which time the supra-orbital neuralgia has usually been much aggravated in spite of the use of prisms. Ascending doses of nux vomica have never failed to give marked relief, so much so that it is with difficulty that he is persuaded during the administration of the drug to make use of any optical therapeutics. The maximum dose has on a number of occasions been fifty drops. The usual dose is thirty-five drops.

CASE VI.—Private patient, female, æt. twenty-three. A slender woman in delicate health, a school-teacher by profession; aggravated asthenopia; occipital headache; occasional attacks of migraine. Refraction error a compound hypermetropic astigmatism; no disease of the fundus; slight haze of the retinas. Insufficiency of the internal recti of ten degrees. The usual treatment with nux vomica has been productive of much relief, enabling the patient to perform long periods of eye-work with comparative comfort. The maximum dose was twenty-five drops; beyond this point there was production of disturbance of the alimentary canal and wakefulness at night. Although the comfort of the patient was increased by the use of the drug, no lessening in the amount of the insufficiency was observed, nor was the relief from headache perfect.

CASE VII.—Private patient, female, æt. forty. A florid woman, but with flabby muscles; easily tired; much headache; eye-pain and inability to perform any lengthy work requiring tension on the accommodation. The refraction a simple hypermetropia of one dioptre. No disease of the fundus except a slight patch of old choroiditis in the nasal half of the left retina. Insufficiency of the internal recti of eight degrees. Ascending doses of nux vomica, the maximum dose being twenty-five drops, beyond which amount the drug produced great restlessness and some nausea, greatly increased the eye-comfort and improved a very troublesome symptom, namely, an appearance as if the lines on a printed page were broken.

CASE VIII.—Private patient, female, æt. nineteen. Of large frame and fine proportions, but intensely nervous, at times hysterical, and subject to intervals of great mental depression; much headache, chiefly in the morning and usually in the occiput, sometimes above the brow. Inability to read for more than a few minutes at a time without great aggravation of the symptoms just detailed. Refraction error a slight compound hypermetropic astigmatism. Insufficiency of the external recti of six degrees; the fundus of each eye reasonably healthy. Her symptoms were practically unrelieved by the use of correcting lenses and prisms. All manner of general treatment was tried with but indifferent success. Finally the use of nux vomica, in ascending doses, was followed by surprising improvement. No lessening in the degree of the insufficiency was detected, but the relief to the eyes was evident and gratifying. The maximum dose was forty drops, without the development of any unpleasant symptoms.

These eight examples will suffice to show the class of cases in which this remedy thus applied has proved useful. I could quote many others with similar results. I could also quote instances which, under apparently exactly similar circumstances, have not been benefited by the drug. The method of using nux vomica in this manner was suggested to me by the paper of Dr. John H. Musser.¹ In his experiments,

¹ Therapeutic Gazette, vol. ii., 1886, p. 9.

in which he desired to demonstrate the influence of age on the dosage of *nux vomica*, he came to the conclusion that the effect of the drug was in inverse proportion to the age of the patient; the susceptibility increased with the age. The manner in which Musser administered the drug was to give ten drops three times a day, and increase three to five drops every second day until some physiological effect was produced. That very full amounts of the remedy can be safely employed in this way is attested by the fact that one of his patients took 200 drops three times a day, and between the ages of fifteen and forty forty-five drops were well borne. It may with perfect reason be asked, What is the use of giving large doses of an exceedingly bitter tincture, when the equivalent amount of its active principle could be gained by the administration of a small granule of strychnia, five minims of a good tincture being equal to $\frac{1}{160}$ grain of strychnia? I have often employed strychnia in precisely similar cases, and it has not seemed to me that the same satisfactory results were obtained. The *nux vomica* in this class of cases, in the form of the tincture, seems to act somewhat analogously to the use of Fowler's solution in ascending doses in chorea and *anæmia*. At all events, the clinical fact remains that under this method of administration, distinct improvement in asthenopia and headache occasioned by ocular insufficiency, especially in neurasthenic cases, is distinctly manifest, precisely as it improves the general tone of the muscular system, aids digestion, and corrects the action of the alimentary canal. One very curious fact which I have observed, is that it never seems to do good if the insufficiency exists in the vertical muscles. As an example of this I may quote the following case:

Private patient, female, *æt.* twenty-nine. A highly nervous woman, a school-teacher by profession; the subject of menstrual disorders and atonic dyspepsia. The two latter difficulties were greatly improved after a course of regulated diet, tonics, and dilatation of the cervix of an anteverted uterus. She was the subject of the most aggravated asthenopia. All manner of glasses had been prescribed without avail. Occipital headache was constant; reading, sewing, and similar occupations had become impossible. The refraction was a low compound hypermetropic astigmatism. There was an insufficiency of the superior recti of three degrees—right hyperphoria of Stevens's classification. Decentration of the lenses, and prisms were productive of no benefit (operation was declined). The persistent use of *nux vomica* signally failed to give relief.

This is not a single example on which I base my opinion that the use of this drug will not be found to be of value in the treatment of the various forms of hyperphoria. I have tried it in a number of cases, and it never had one particle of effect,

unless, perhaps, the good of a bitter tonic upon the stomach.

Another point of interest in the administration of *nux vomica* and of strychnia, for this and for similar purposes in disturbances of the eyes, is the condition of the retina. It is a well-known fact that irritations of the nerves contraindicate the use of full doses of *nux vomica* or its alkaloid. It is a therapeutic law which must not be broken, that this drug should not be administered in paralyses from cerebral hemorrhage until all irritation produced by the clot has passed away. On precisely the same principle, *nux vomica* and strychnia are contraindicated in ocular insufficiencies associated with headaches, if at the same time there is much retinal irritability, characterized by dread of light, manifest haze and thickening of the fibre layer, and the presence of numerous lymph reflexes throughout the eye-ground. I have more than once not only not seen the drug relieve the patient, but distinctly aggravate the headache. This was beautifully illustrated by the following case:

Private patient, female, *æt.* ten; very *anæmic*; of rapid growth; much headache, worse during school hours. The refraction was a simple hypermetropia. There was a slight insufficiency of the internal recti, and marked retinal irritation sufficient to produce decided photophobia. This somewhat subsided under the prolonged use of atropine and afterward of the correcting lenses, but still remained, and the headaches failed to disappear. The child had long been taking a tonic from her family physician. Upon investigation this was found to contain very full doses of strychnia, the exact amount of which I am unable to state. When this was discontinued and simply iron substituted, the headaches rapidly disappeared, and, so far as I am aware, they have never returned.

This is not a mere coincidence, for I have over and over again tried the experiment in patients who had markedly irritable retinas, and have always succeeded, when I pushed *nux vomica*, in aggravating their pain.¹

In conclusion, I would say that in those cases of ocular insufficiencies affecting the lateral muscles, where surgical interference is either impossible or contraindicated, where the use of correcting lenses and prisms has not been sufficient, and where the retina is quiet and dread of light is absent, ascending doses of a good tincture of *nux vomica*

¹ I have heard my colleague, Dr. B. Alexander Randall, bring out this point with much force in a discussion in the Neurological Society some years ago, during the presentation of the subject of Tobacco Amblyopia, contrasting the remarkable facts that on the one hand irritations of the optic nerve and retina were usually aggravated by the use of strychnia, while on the other, when tobacco was the poison which had produced an axial neuritis, this was speedily and often remarkably relieved by the administration of the drug.

will afford, in most cases, marked relief. If the method be tried, the drug must, however, be pushed up to its full physiological effect, and, according to the experiments of Musser, between the ages of fifteen and forty, a dose of forty-five drops will readily be borne. In fact, very much larger doses, if watched, may be administered without hesitation.

A PORRO-CÆSAREAN SECTION.

*Rendered Necessary by a Deformed Pelvis, and a Uterus
Enormously Enlarged by Fibroid Growths;
Together with a Cyst of the Right
Broad Ligament.*

BY JOHN J. BLACK, M.D.,
OF NEW CASTLE, DELAWARE.

In April, 1889, Dr. Benjamin B. Peters, of Christiana, New Castle Co., Delaware, sent Sarah T—, colored, aged twenty-seven years, to me, requesting that I should examine her, and give my opinion as to the condition present, at the same time informing me that he was sure she had had for some time an abnormal growth in the abdomen, and in addition that he thought at the present time she was very likely pregnant. Sarah was mentally a bright woman of her class, and full of vim and pluck, unmarried, and apparently much distressed over her fears of becoming a mother, although she said, "She knew she had had a lump in her stomach for several years." She was a markedly deformed woman, very short in stature, with the peculiarly developed head of a dwarf, very long arms, a fairly developed body down to the pelvis, but from thence down much distorted and out of shape. Her thighs and legs were very much bowed, very short naturally, and there was very little motion in the right hip-joint; not from its being defective, but from distortion about the upper part and neck of the femur. The case was one in every respect typical of rickets. She had a brother even more deformed than herself, and two sisters more or less deformed, one of whom, Dr. F. L. Springer, of Christiana, informed me he had delivered, several years previously, after craniotomy.

The father and mother were both large, and, physically, fine specimens of their race, and no suspicion of deformities could be traced in their ancestors. An examination of Sarah showed a considerable abdominal enlargement, somewhat larger to the right of the median line and having a somewhat nodulated feeling lower down to the left. Palpation over the prominence showed the presence of fluid. Vaginal examination told me little, as I could not reach the os uteri, and it at once became evident that I had a seriously deformed pelvis to deal with. I could not hear the foetal heart, and she had felt no motion, but acknowledged it was possible she might be pregnant, as she had not menstruated since the preceding November.

From rational and clinical signs I believed there was abnormal growth or growths in the abdomen, and agreed with Dr. Peters in his suspicions of pregnancy. Shortly after her visit to me I made an appointment with Dr. Peters, and examined her

critically as to the condition of her pelvis, at her home, with a view to the treatment of her condition. I soon found out the extreme nature of the deformity, and the utter impossibility of delivering her of a living child by inducing premature labor, at the viable period, or even by craniotomy—the space was so contracted. Dr. Peters and I could only introduce two fingers through the inferior strait, and could make no satisfactory examination of the os. My hand is small, but I could by no means force it into the vagina.

The right limb could not be sufficiently moved to give good working space to the outlet of the pelvis. The arch of the pubes was very narrow, scarcely admitting two fingers, the symphysis was depressed, and the promontory of the sacrum was encountered when the fingers were introduced, giving at first the sensation of the presence of a child's head. I doubt if there was more than one inch in the antero-posterior diameter.

From the condition of the uterus, enlarged as it was by the fibroid masses, it was impossible for a foetal head to engage in the superior strait.

The condition of affairs was stated to the patient and to her mother, and they agreed to let us do all we could to save her and her child. We could propose nothing short of a gastro-hysterotomy.

Monday, August 19, 1889, I was summoned to the case by Dr. Peters. I found the woman in labor, and, unfortunately, before I could get to her residence, the waters had come away, thus probably rendering the extraction of the child from the uterus a little more difficult. The woman was in fair condition and good health, as far as her kidneys and other organs were concerned. After consultation with Dr. Peters, Dr. Francis L. Springer, of Christiana, and Dr. R. R. Tybout, of New Castle, we decided to perform the Cæsarean operation and treat, as we went on, any complications that might arise. The foetal heart could be heard and a left vertex presentation made out, externally.

Dr. Peters kindly took charge of the anæsthetic—chloroform—while Drs. Tybout and Springer gave me direct assistance. Antiseptic precautions were used in every detail, from the beginning to the end of the case. After putting the abdominal surface in proper condition, I at once made an incision from the navel to near the pubes, incising the parts as they appeared, and on opening the abdomen a cyst at once came into view. With a towel (antiseptic) around the wound, the cyst was evacuated of a straw-colored fluid. The uterus now came into view—a large, interstitial fibroid mass extending from above the centre down the left wall to the neck. Over the surface were also numerous fibroid nodules. A large fibroid mass was felt behind, along with several smaller nodes. The very serious nature of the case now became apparent. I prolonged the abdominal incision above the navel to the left, and then at once opened the uterus through the fibroid masses. The hemorrhage was terrific, but we kept the blood from entering the abdominal cavity as much as possible by towels held by Drs. Springer and Tybout. After the incision into the uterus was sufficiently large, I introduced my hand, and felt first the child's

head, but the waters having been evacuated the walls of the uterus tightly clasped it. I seized first one foot and handed it to Dr. Springer, then I seized the other foot and gave it to Dr. Tybout, and they at once dexterously delivered a large, male child. The cord was wound tightly around the neck three times, and the child was in a condition of asphyxia. It was given in charge of Dr. Tybout, who, by skilful manipulation, soon had it restored and crying lustily. In the meantime Dr. Springer had grasped the uterus around the neck and checked the hemorrhage. I at once delivered the placenta and turned the uterus completely out of the abdomen, and constricted it at the neck by a piece of rubber tubing, thus controlling all bleeding. The woman was in good condition, and had the uterus been normal, by Säger's method I believe we could have saved both mother and child without trouble. The mass could not, however, be sewed up and returned into the abdomen; the patient would never have rallied, and the hemorrhage could not have been controlled; the only thing was to separate, the mass and extirpate it.

The remains of the cyst were found about the right broad ligament, and there was a small cyst of the same kind, the size of a hen's egg, about the parovarium on the left side. We ligated with silk, and separated the round and broad ligament and attachments on either side, and cut the ligatures short, carefully lifting the bladder from the uterus (the first having been emptied by a catheter before the operation) and applied the *serre-nœud*, expecting at least to constrict the neck sufficiently to check hemorrhage and allow us to take away the rubber tube, and then treat the pedicle in the lower angle of the wound. I soon found to my sorrow that the screw-threads slipped, and the wire would not hold sufficiently even as a constrictor, and as I was utterly without resource as to other instruments, there was nothing left to do but to ligate the part, which we did—fortunately finding a strong hemp cord in the house. After ligation I removed the whole organ, tumors and all.

There was no hemorrhage or further trouble. The child and the ablated mass weighed eight pounds. The abdomen was closed by catgut in the usual manner, after having been cleansed and sponged thoroughly dry. The ligature was brought out the dependent angle of the wound, and antiseptic dressings and bandages were applied. The woman was now quite weak. A syringe of fluid extract of ergot and a number of syringefuls of whiskey were injected into the outer parts of the thighs, and she was put to bed, with warm blankets, etc., around her. The child was now in a very satisfactory condition, just as much so as though he had been born by an easy birth *per vias naturales*. We then and there named him Cæsar Trippet.

We found, on examining the pelvis, that the deformity was fully as much as had been expected, and its condition and that of the uterus would have probably demanded delivery by other than the natural way at any period of the pregnancy. If the uterus could have contracted sufficiently to expel the child, I doubt if it could have so contracted as to prevent the mother dying from post-partum hemorrhage.

As to the time of election for the operation, the old mother was superstitious and very peculiar, and the only election we had was to await the coming on of the symptoms of labor. Up to this point we had done all we could for this unfortunate patient, and now we were compelled to leave her without the care of any one skilled in nursing or attention to the sick. The only intelligent care she did receive was what her physicians were able to give her in a house destitute not only of the luxuries but even of the necessities of life.

The bladder was relieved regularly by Dr. Tybout, and the contents, when evacuated, showed this viscus to be intact. Her diet was chiefly milk, with stimulants as required, and opium to control the bowels and any irritation that might arise. The next morning she was lively and joking, and remarked to me that it was the "fust time" she had seen her feet over her belly for a very long time.

Her pulse was 95, and her temperature 100°. She had not vomited or complained of nausea; had some appetite, and no abnormal thirst, and her countenance was not serious. In the afternoon of this day her pulse and temperature began to go up, and Dr. Tybout removed the dressings and examined the wound and the adjacent parts. All were in good condition. There was no very marked tympanites. Soon after this, irritability of the stomach came on, which increased until the time of her death, at 9 P.M. of the third day after the operation, from exhaustion.



Posterior view of uterus showing fibroids.

I have found no such case as this on record; here is not only a Cæsaean section, but a Porro-Cæsaean section, complicated by the existence of an ovarian cyst, or rather a cyst of the broad ligament, from either one of which a fatal result might follow. The only case I can find on record approaching it is that in which Dr. Horatio R. Storer, in 1869, performed the Cæsaean section to remove a dead foetus—a fibro-cystic tumor filling the pelvis. After incising the uterus, the hemorrhage was so alarming that he ligated the cervix, and removed the uterus with the *écraseur*. The patient died.

Dr. Emmet says, in his *Principles and Practice of Gynecology*, edition of 1884, p. 579 *et seq.*: "To remove the uterus when enormously enlarged from a

fibroid growth is unquestionably one of the most formidable operations a surgeon can be called upon to undertake. The degree of success which has so far attended the operation offers but little encouragement for the future. Seeing the results of the operation in this country, no surgeon is justified in attempting to remove the uterus for the growth of a fibrous tumor, except as a forlorn hope." Such being the opinion of one whose authority is so unquestioned, how much more of a forlorn hope was the case I have reported!

NEW CASTLE, DEL., September, 1889.

Dr. Robert P. Harris, of Philadelphia, has kindly added the following remarks: "This operation of Dr. Black deserves a special notice, from the fact that it was the first Cæsarean section ever performed in the State of Delaware. That death should have followed it is not to be wondered at, when we consider that the subject was a rachitic dwarf, with a collapsed pelvis; and that her case was rendered far more serious by reason of the abnormal state of her uterine tissues. Women with uterine fibroids have been saved under the old Cæsarean, Porro-Cæsarean, and new Cæsarean sections, it is true; but the proportion has been very small, compared with that of the cases in which the uterine tissues have been free from disease. The Porro method can rarely be employed with advantage in cases of obstruction by uterine fibroids, because of the fact that the cervix is generally involved in the disease itself; and in the new Cæsarean the degeneration of tissue to be sutured is a serious obstacle to a satisfactory closure and an early union. Two Säger and two Porro cases in Philadelphia, all fatal, attest the risk to life in operating on parturient women with obstruction by fibroids. There have now been performed, in all countries, 269 Porro-Cæsarean operations, with 122 deaths; the record of our own country is 11 cases, with 8 deaths—a higher mortality than any European country, except Scotland, which has lost 4 out of 5; Austria has saved 43 out of 61. Germany has lost only 13 out of her first 98 Säger cases."

A CASE OF CHRONIC PURULENT DISCHARGE FROM THE EAR, WITH DEAFNESS, CURED BY EXCISION OF THE MEMBRANA TYMPANI AND MALLEUS.

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In a paper on "Purulent Inflammation of the Tympanic Attic," read at a special meeting of the American Otolological Society, held in Washington, September 18, 1888,¹ in speaking of the treatment

of this disease of the ear, I said, in referring to the comparative uselessness of all means of treatment heretofore used in this disease, and of the encouraging results promised by excision of the membrana, "although I have not yet performed such an operation for the relief of this disease, I feel sure that hereafter I can obtain a radical cure most surely by this means—and perhaps not at all by any other—and I am prepared thus to inform my patients, as this form of purulency of the middle ear, from its proximity to the brain, is the most threatening to life, and demands a careful consideration of every means for its radical cure."

Case XX., alluded to in the aforesaid paper as then under treatment, remained under treatment a year without being cured, and forms the subject of the present paper. The notes of the case are as follows:

July 14, 1888. Miss M., aged twenty-three years, states that in her childhood her tonsils were enlarged: excision of these was soon followed by some earache and dulness of hearing in both ears; but these symptoms soon passed off and were forgotten, excepting that, she thinks, the right ear, the now suppurating one, has never heard sharply. Six years previous to the time of her first consulting me, suddenly, without any pain or warning of any kind, the right ear felt stopped. Examination by her physician at that time revealed the presence of a polyp, the precise location of which cannot now be stated. The polyp was removed. Since then, off and on, there has been a constant, slight, but offensive purulent discharge from this ear—hardly enough to flow from the meatus, however. In the meantime numerous polypi have been removed, probably from the region of the perforation in the *membrana flaccida*, by surgeons in this country and in Europe, but no permanent relief has followed these operations.

The hearing was found, at the above date, to be practically nothing in the affected ear. Examination revealed the *membrana vibrans* to be intact, retracted, white, dry, and shining and a *large perforation in the membrana flaccida*, or Shrapnell's membrane, through which the white neck of the malleus could be seen, and from which a slight, scanty, offensive discharge came.

Treatment.—The attic was syringed with peroxide of hydrogen and then with a 2 per cent. solution of carbolic acid, by means of Blake's tympanic syringe. At the second syringing a small polyp was brought to view, attached to the inner edge of the perforation, and which had been concealed in the attic at the time of the first examination. This was removed with slender forceps, after which the discharge seemed less. During the subsequent two months the patient wiped out her ear every second day with absorbent cotton, this being sufficient to keep it clean, and sometimes mopped it out with a 2 per cent. carbolic acid solution.

By September 1st there was found to be a minimum discharge—some days none at all. At this time peroxide of hydrogen failed to make the char-

¹ New York Medical Journal, November 24, 1888.

acteristic foaming, and it was concluded that no pus was in the attic. A small granulation was removed from the edge of the perforation, and the attic washed out with a 2 per cent. solution of carbolic acid, by means of the tympanic syringe inserted through the perforation in the flaccid membrane.

This form of treatment, by means of injections of peroxide of hydrogen, carbolic acid solution, and alcohol into the attic once, twice, or three times a week, was kept up for a year. Between the treatments in my office, the patient instilled into her ear, once daily, peroxide of hydrogen, and followed it by instilling alcohol or carbolic acid solutions. While the discharge became extremely small in quantity, and no more granulations or polypi formed at the perforation in the membrana flaccida, the discharge did not cease, and there were several attacks of acute otitis externa, with some pain, usually quickly relieved by applying a few drops of a 20 per cent. solution of ichthyol to the affected ear. *But the ear did not get well*, as the discharge still continued, though small in quantity. The hearing in the affected ear was *nothing*.

Being convinced that the disease in the ear was due either to defective drainage or the continued presence of diseased tissue in the attic, which injected solutions could not reach, or if they did reach, could not cure, I resolved to excise the membrana tympani and the malleus, in order to secure access to the diseased parts; to remove them, if possible, and, in any event, to secure ample means of direct medication to and drainage from the walls of the attic. Accordingly, on July 29, 1889, the patient was etherized, and under illumination of the auditory canal, by means of the electric head-lamp, the membrana tympani and the malleus were excised. The head of the malleus was found half destroyed by necrosis on its free surface, its articular surface with the incus being normal. The other auditory ossicles and the walls of the attic and atrium were entirely normal. Here, then, was the cause of the incurable purulent discharge from the attic. The ligaments at the neck of the malleus were very tough and broad, and had acted as a diaphragm between the attic and the atrium below, and also as the floor of a sinus running from the diseased malleus head and the perforation in the membrana flaccida.

The steps of the operation of excision consisted in:

1. An incision behind the short process, with a slender curved blade.
2. Through this initial incision a round-pointed blade, curved in the plane of its broad surface, was introduced, and being kept close to the manubrium, below the insertion of the tendon of the tensor tympani, was pressed upward against the latter, and the tendon thus severed.
3. Then a straight blade, with rounded blunt point was used to cut around the membrana tympani in the annulus tympanicus, thus entirely detaching it, and severing the hammer ligaments at the neck of the bone.
4. Instead of forceps, the polypus snare was now used to seize the malleus, being passed around the manubrium, and the malleus with the membrana tympani were removed from the ear.

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The slight hemorrhage was controlled by mopping the fundus of the ear with a four per cent. solution of cocaine muriate. During the operation the fundus of the ear was mopped frequently with a two and a half per cent. solution of carbolic acid. After the operation the meatus of the canal was lightly tamponed with cotton sprinkled with iodoform, and left in place for twenty-four hours.

The next day the patient went about the house. The cotton tampon was slightly discolored on its inner end with a pinkish serum. There was no purulent discharge, and there has not been any since the operation, nearly three months ago.

The iodoform tampon in the auditory canal was discontinued in four or five days, and one containing powdered boric acid sprinkled over it was substituted, and worn for a week longer. Then simply a little cotton pellet was worn in the meatus, in the open air, to protect the exposed tympanic cavity. On some days the tampon was a little moistened with a serous fluid, but this soon ceased to appear. The absence of any reaction, and the tendency to rapid healing in this case, I am disposed to attribute largely to the antiseptic measures during and after the operation.

August 12. There was now no discharge of any kind from the ear. The hearing was found to be a little improved; about a foot for loud words.

10th. Still no discharge. The mucous membrane of the promontory is pale and rough, but entirely dry. The region of the membrana flaccida is narrowing. Hearing equals a whisper at six inches.

The patient now went on a tour to the Adirondacks, *free, for the first time in seven years, from the annoyance of a running from the ear, and the care it demanded.*

The patient was not seen again until September 23th, when it was found that a new membrane had formed from the segment of Rivinus, the region of the membrana flaccida, down to the promontory. There was no discharge. The hearing was, for whispered words, two to three feet.

October 11. The delicate membrane, bluish and transparent, rises and falls under gentle suction with the pneumatic speculum. The hearing was *nine feet* for isolated words in ordinary conversational tone.

Here, therefore, is offered an account of a case of chronic purulency and deafness, caused by necrosis of the head of the malleus, and altered tension and conductivity in the ossicles, cured of the discharge and the deafness by excision of the useless membrane and a necrotic malleus. The cure of the purulency is easily explained, but the improved hearing is not as easily explicable. I venture to suggest that the conducting power of the ossicles was interfered with by the presence of pus about the ossicles in the attic, and by the pathological bands about the malleus already mentioned, which prevented ready vibration. Also the diseased condition of the head of the malleus loosened its articulation with the incus, and impaired its leverage on the latter. Hence, a wave of sound falling on the membrana and malleus could not

transmit its inward oscillations to the incus, and thence to the stapes and the labyrinth.

When the membrana tympani and the necrotic malleus-head were removed from the attic, waves of sound fell directly upon the incus and the stapes, and were conveyed to the labyrinth. As the new membrane formed, its expansion offered a broader surface to the waves of sound, and possibly helped to increase their leverage on the remaining ossicles, thus transmitting more sound and increasing the hearing. The continuance of this normal stimulus to the movements of the stapes in the oval window gradually overcame the partial ankylosis which had ensued at that point from disease, and the hearing, in consequence, has *steadily improved*, since the operation, from nothing to *nine feet*.

Let us suppose that the chronic purulency of the attic had been, or could have been, cured by injections through the perforation in the membrana flaccida into the attic cavity. The hearing would not have been improved, because the impaired malleus-head, the stiffened ossicles, and the pathological bands around the neck of the malleus would not have been removed, and hence the impaired mobility of the incus and stapes would have still remained as a hindrance to hearing.

We see, therefore, that the operation of excision of the membrana tympani and the malleus offers not only a great hope of curing chronic purulency, especially of the attic, but also of relieving deafness due to a stiffened membrana and ossicles, by the removal of pathological bands prohibiting free oscillations in the ossicles, and by thus permitting sound-waves to fall directly upon the stapes in the oval window, and perhaps also upon the membrana tympani secundaria.

The gradual improvement in the hearing in this case, as has been observed by Sexton in other cases, is worthy of note, and would seem to indicate, as suggested above, that the deafness, in many instances, is due to a quasi-ankylosis in the ossicles, especially in the stapes, and that when this bonelet is exposed by the operation to the direct action of sound-waves, the passive motion thus brought to bear on the ankylosed structures renews their ready vibratility, and the hearing is improved to a greater or less degree.

OSTEOTOMY FOR OVERLAPPING UNION OF A FRACTURE OF THE FEMUR.

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AMONG the great advances of surgery made possible by the strict application of antiseptic measures are the operations on bones. Deformities such as would, no doubt, have been abandoned some years ago, are to-day remedied with the greatest ease, restoring, as in the following case, the perfect use of

a limb which, owing to its deformity, the patient wished to have amputated.

W. K., aged forty years, entered the Charity Hospital, in New Orleans, presenting the following history: He had had an attack of acute articular rheumatism about one year previously, as a result of which his right knee had become ankylosed in a semiflexed position, necessitating his using crutches. Three months afterward he fell and broke his right thigh, and the treatment having been somewhat neglected, solid union took place in the following abnormal position. The ankylosed and flexed knee was everted, and there was an overlapping of the fractured ends of the femur to the extent of fully six inches. There was also a large tumor, consisting of callus, around the overlapping fragments, so that the limb was a great encumbrance to the patient, who came to have it amputated.

Instead of this we had recourse to osteotomy. The patient being anesthetized, and the parts having been rendered thoroughly aseptic, an incision eight inches long was made on the external surface of the thigh, extending to the bone, directly over the overlapping fragments. The Esmarch elastic bandage having been previously applied, we were not troubled with hemorrhage. After having exposed the overlapping portions of the bone, they were entirely separated with hammer and chisel. The ends of the fragments were likewise denuded. This being done, the wound was thoroughly washed with the acid sublimate solution,¹ and then packed with iodoform gauze, and a stout bandage applied around the thigh. Forcible extension was made about the knee-joint, destroying the fibrinous ankylosis, and straightening the joint. The patient being still anesthetized, forcible extension was continued, and in about fifteen minutes the limb had been brought to measure the same length as its fellow. When this point was reached, the limb was put up in a Liston's splint, with a weight and pulley extension apparatus.

During the first twenty-four hours after the operation, considerable oozing took place from the wound. The dressing was removed, and the hemorrhage found to come directly from the chiselled bone; the wound was again packed as before. But the patient had lost so much blood that it was thought wise to resort to transfusion. For this purpose sixteen ounces of the following solution were injected into the median basilic vein of the left arm:

Sodii chloridi	3 j.
Potass. chloridi	gr. x.
Sodii sulphat.	gr. jss.
Sodii phosphat.	gr. iij.
Sodii carbonat.	gr. vj.
Aquæ destill.	3 xxiv.

Prior to its use, this solution was boiled, and allowed to cool to 98½° F.

Half an hour after the injection the patient was very much better; his pulse became firm and regular. Stimulants were also administered. From this on, improvement was rapid. Appetite increased; no

¹ Sauré Sublimat-Lösung als desinficirendes Mittel, etc., by Dr. Ernest Laplace. Deutsche med. Wochenschrift, 1887, No. 40.

fever was present, and no suppuration from the wound. The dressing was changed twice, so as to make room for granulation from below. Forty days after the operation the patient left his bed, there being no perceptible difference in the length or appearance of the two thighs, except the line of incision for the operation. Massage and passive motion restored considerable motion to the once ankylosed knee. To-day the patient goes about with almost as sound a limb as he possesses in the unaffected one.

From this case we learn that :

1. With antiseptic precautions, the operation for deformities even as extensive as this was, should be attempted.
2. That a proper management of the case will restore the limb to as great a degree of usefulness as it ever had.
3. That should an unavoidable and profuse hemorrhage endanger the patient, transfusion as it was used in this case will materially improve the condition of the patient, putting him in better condition to rally from the injury.

HOSPITAL NOTES.

CARCINOMA OF CERVIX; CARCINOMA OF LIVER.

*Abstract of a Clinical Lecture
Delivered by Matthew D. Mann, M.D., at Buffalo, New York.*

CASE I.—This patient entered for operation, the diagnosis of cancer of the uterus having previously been made. There was a history of much pain in the case, which is not, according to Dr. Mann's experience, a frequent symptom of cancer of the cervix. Vaginal examination revealed the entire cervix and part of the vaginal walls to be an irregular mass of soft bleeding tissue, which is characteristic of cancer. Adenoma of the cervix grows from a more or less distinct pedicle, does not break down under the fingers or bleed so readily.

The patient was etherized in the dorsal position, the legs being retained in position by the apparatus of Dr. H. A. Kelly. Further examination discovered cancerous infiltration of the broad ligament, which, of course, precluded the possibility of a radical operation. With a sharp spoon as much of the growth as seemed safe was removed. Following this, the vagina was irrigated with an antiseptic solution, and packed with non-absorbent cotton, which previously had been soaked in a solution of hydronaphthol and alum, and sprinkled with iodoform. The following day this tampon was to be removed, and the raw surfaces covered with small pledgets of cotton soaked in a fifty per cent. solution of chloride of zinc. These should be covered with gutta-percha tissue, and to neutralize the excess of the caustic, the vagina be tamponed with cotton wrung from a solution of bicarbonate of soda. After forty-eight hours the tampon should be removed and followed by frequent antiseptic irrigation until the sloughs separate. If necessary the cauterization will be repeated.

CASE II.—This case sought relief from an enlargement of the abdomen which had taken place during the last three years, and had been diagnosed as an ovarian

tumor. From her facies alone, Dr. Mann believed that she was not suffering from an ovarian tumor, in which opinion he was confirmed by further examination. The abdomen was greatly distended, and as the patient lay upon her back there was anterior flattening with bulging in the flanks. The entire enlargement was soft and uniformly yielding. On percussion there was tympany in front, and flatness at the sides, which is an important point in the diagnosis between free fluid and fluid confined in a cyst. Dr. Mann's diagnosis in this case then, was ascites from disease of the liver, kidneys, or heart, but which of the three could be determined with certainty only after drawing off the fluid. Subsequently the abdomen was tapped and about ten quarts of yellowish, but clear, serum drawn off. After this a tumor on the under surface of, and attached to, the liver was detected, which was considered cancerous.

MEDICAL PROGRESS.

The Treatment of Pertussis with Resorcin.—DR. JUSTUS ANDER reports quite remarkable results in the treatment of whooping-cough with resorcin. In a child of seven years, on the second day after resorcin was prescribed, there was great improvement in the symptoms, and sleep at night was much less disturbed. In ten days, the cough had disappeared. With five other children the effects were even more pronounced, all being cured within a week. An infant of six months with vomiting after each paroxysm of coughing, was relieved by the second dose, and in five days the cough ceased. In the latter case, Dr. Andeer used a one-half per cent. solution in sweetened water given from the nursing bottle. In the former cases, he gave a two per cent. solution in water, of which half a wineglassful was administered four times daily, with directions that part should be used as a gargle, the remainder swallowed. He does not think that inhalations, or painting of the pharynx, with this solution, possess any advantages over this simple method. —*Centralblatt für die medicinischen Wissenschaften*, October 5, 1889.

Methods of Rendering Sponges Aseptic.—PERREN, in the *Revue Générale de Clinique et de Thérapeutique* for October 10, 1889, gives the following method for the preparation of aseptic sponges: They are to be pounded with a wooden mallet and afterward carefully soaked in plenty of pure water. Following this, the sponges are placed in a bath of hydrochloric acid of the strength of one per cent., in order to dissolve thoroughly calcareous particles, and when this is accomplished, they are inserted into a jar containing a solution of potassium permanganate, in which they remain six hours. For blanching they are submitted to the action of a solution containing bisulphite of soda in the proportion 150 grains to a quart of water. Finally, all these processes being completed, they are placed in one of the following solutions for preservation:

R.—Carbolic acid 15 grains.
Alcohol 1½ drachms.
Water 1 quart.

or:

R.—Thymol 15 grains.
Alcohol 1½ drachms.
Water 1 quart.

The Effects of Ergot after Confinement.—In order to determine the precise value of ergot in childbed, Dr. Pinzoni administered it to ninety-one lying-in patients, generally in the form of about two grammes of the powder daily. Seventy-nine similar cases were treated without ergot. After comparing the two series, he came to the following conclusions: Ergot has little or no influence on the temperature; at the most a slight rise is occasionally observed. It hastens the pulse a little, yet has no marked influence on the physiological retardation of the pulse observed during the first days after delivery. The physiological increase in the secretion of urine during the earlier days is favored by ergot. The involution of the uterus, according to Dr. Pinzoni's researches, is either totally uninfluenced or slightly retarded. The escape of the lochia remains normal when the drug is given; but clots, as universal experience has proved, are more readily expelled. The lochia seldom smell fetid when the ergot is taken. It delays the after-pains in primiparae, and lessens them when they have already commenced. The secretion of milk is retarded and lessened, and sometimes completely suppressed. Ergot seems, in the belief of Dr. Pinzoni, to be a prophylactic against puerperal fever, and an indirect antiseptic agent. When infection has already taken place, it appears, on the other hand, to hasten the entrance of the virus into the circulation. Dr. Pinzoni's researches appeared in the *Bolletino delle Scienze med. Bologna*, series vi., vol. xx. —*Archives of Gynecology, Obstetrics, and Pediatrics*, October, 1889.

Pseudo-orchitis.—In *L'Union Méd. et Scient. du Nord-Est* for July, 1889, GUELLIOT, of Reims, gives an interesting account of this condition, which he asserts is produced by effort of such a kind as to cause a strain involving the cremaster muscle. The result of the effort may produce rupture of the spermatic vein, the effused blood being limited to the cord, and, perhaps, in addition, the epididymis. The symptoms of this state are characteristic in that they are generally on the left side, the pain is circumscribed in its intensity, while the presence of dilated veins, completely engorged, also acts as a diagnostic sign.

Cornutin in Uterine Hemorrhage.—DR. H. THOMPSON has used cornutin extensively in various forms of uterine hemorrhage. According to Dr. Kobert's method, the remedy was administered either subcutaneously, in the following formula:

R.—Cornutin gr. $\frac{3}{4}$.
Water 3 ijs.

Mix, make solution, and add:

Hydrochloric acid gtt. iv.

or in the form of pills:

R.—Cornutin gr. $1\frac{1}{4}$.
Hydrate of aluminium grs. 46.

Add water and glycerine aa q. s. for twenty pills.

Dose, two or three pills.

The cornutin in solution generally is not to be recommended, as it becomes cloudy and unfit for use in a very short time. In weak or inefficient pains the use of this drug is not to be recommended, while in atonic hemorrhage or after abortion it is of great value. Especially rapid is its action in metrorrhagia and menorrhagia fol-

lowing endometritis, metritis, and inflammatory conditions of the uterine appendages. In two cases of menorrhagia the result of endometritis, from one-third to one-half grain of the drug, subcutaneously administered, produced intense lumbar pains followed by complete cessation of the hemorrhage within ten minutes. The influence of the drug lasted for two hours, after which another dose was necessary. In a case of very severe metrorrhagia caused by double ovarian tumors, two three-quarter-grain doses gave entire relief.

The average dose of this drug is from one-thirty-second to one-eighth grain subcutaneously, and from one-eighth to one-fifth grain by the mouth. —*Archives of Gynecology, Obstetrics, and Pediatrics*, October, 1889.

Treatment of Gastric Ulcer.—In a recent clinical lecture on gastric ulcer, Dr. Byrom Bramwell, in speaking of the treatment of gastric ulcer, insisted upon the importance of giving the patient as much food as is necessary for the purpose of nutrition, and the avoidance of all foods which irritate the inflamed and ulcerated stomach, and which produce pain or vomiting. Liquid food, and especially milk, fill these requirements, though the latter is sometimes not well borne, unless boiled or partially predigested with pancreatin. Half a teaspoonful, or a teaspoonful, of the liquor pepticus given immediately after a meal, is often useful in those cases in which it is not considered necessary to peptonize the food before introducing it into the stomach. In the severe cases in which peptonized foods disagree, the stomach should, for a time, be placed at absolute rest, and the patient fed *per rectum*. It is now well known that it is possible to support patients for long periods of time by means of nutrient enemata (milk, beef-tea, defibrinized ox blood) and nutrient suppositories. Nutrient enemata should be given in small quantities at a time, to insure their retention, and when the rectum becomes irritable, a few drops of laudanum should be added to every third or fourth enema. Potatoes, raw apples, meat, and pastry, are especially injurious. Tea also is bad.

The second indication is to administer remedies which will promote the healing of the ulcer. In ulcer of the stomach, as in every other disease, one of the great principles which should regulate our treatment is to remove the cause of the condition. Ulceration of the stomach is very frequently seen in chlorosis, and in such cases he has found arsenic in the form of Fowler's solution, with a teaspoonful of liquor pepticus (Benger's), a most valuable remedy. Bismuth and nitrate of silver are also very useful in the treatment of many cases of ulcer of the stomach. In others, where the pain after taking food is severe, a small dose of opium or morphia, given in the form of a pill, is of advantage. In cases where there is distinct tenderness on pressure, the application of a blister is often beneficial.

In treating ulcer of the stomach, it is necessary to attend to the condition of the bowels. Cascara, or castor oil, may be given when medicine is required; strong purgatives should be avoided. —*Studies in Clinical Medicine*.

Subcutaneous Saline Injections.—In the *Archiv f. Gynäkologie*, DR. MUNCHMEYER, of Berlin, reports his results in the treatment of anæmia by subcutaneous injections of saline solution. The solution was 0.6 per cent. of

common salt, and the results were satisfactory. The anæmia was in nearly all the cases the result of post-partum hemorrhage.

In ten further cases of extreme debility after laparotomy and other serious operations, a similar injection was without effect, owing, as was believed, to paralysis of the cardiac muscle from brown atrophy. It is just possible that death was hastened in some of these cases by œdema of the lungs. All cases of anæmic debility are not suitable for treatment, as the pulmonary circulation is readily overloaded with fluid. In those cases of post-partum hemorrhage in which the injection was without result, it was probably because it was done too late. As the point for puncture, the infra-clavicular region was considered very suitable, being near the heart and offering the best chance for rapid diffusion of the fluid. Strong stimulants should be given previously, and the injection supported by hot packings and wrapping of the extremities in hot cloths. As used, the solution was always sterilized. Not more than a litre (thirty-five ounces) was ever injected; the range being between half a litre and a litre. The apparatus used consisted of a funnel, an India-rubber tube one metre long, and several needles, which are readily kept disinfected. The needles can be sterilized in a flame, and the tube by passing a five per cent. solution of carbolic acid through it. The physiological fluid should, of course, be passed through before puncturing. The fluid injected is to be dispersed through the adjacent parts by massage, and, if the lumps produced by the collections of fluid are too large, another spot may be chosen. The injection must be continued until a result is obtained. In the eight cases reported, success was achieved in, at the longest, three hours.

Dr. Pregaldioli recommends the subcutaneous injection of a solution of sea-salt in acute anæmia. He claims that this increases blood-pressure, and thereby stimulates the nerves. Acute anæmia causes death, not by want of oxygen, but by rapid sinking of the blood-pressure, which causes sudden anæmia of the nerve-centres. His experiments showed that the fluid injected into the cellular tissues (a six per cent. solution of sea-salt) was rapidly absorbed, and that it had no deleterious influence on the regeneration of the blood corpuscles. The quantity of fluid required was from half to two-thirds of the quantity of blood withdrawn.—*The Medical Press and Circular*, October 9, 1889.

Treatment of Seborrhœic Eczema.—According to the *Monatschrift für Dermatologie*, DR. UNNA's favorite formula for the treatment of seborrhœic and other varieties of eczema, is a solution of three drachms of finely powdered resorcin with an equal quantity of glycerine, in six ounces of alcohol, diluted with four times the quantity of water or chamomile tea. A thin layer of cotton-wool well moistened with the solution is applied, covered with some waterproof material, and fastened by a bandage. These applications are particularly useful when the treatment is prolonged, or when it is carried out by night. They are, of course, impossible in general eczema of adults, but not in that of infants. Dr. Unna describes an especially important effect following the application of resorcin, viz., a swelling of the epidermis, by which all painful fissures are healed in a single night. In order to insure healing, he advises that the skin should be anointed after the removal of the

bandage, and that washing with soap should be avoided. A few people suffer from a resorcin idiosyncrasy, which necessitates the immediate cessation of this treatment, and the application of powder to the affected parts. This idiosyncrasy is, however, very rare, as he has only met with it ten times among two thousand cases.—*Therapeutic Gazette*, October 15, 1889.

Menthol in Pruritus.—DR. SAALFELD uses the following formulæ in itching of the skin from various causes:

R.—Menthol gr. xx.
Alcoholis f ʒij.—M.

Or an ointment:

R.—Menthol gr. xl.
Olium olivæ ʒij.
Lanolin ad ʒij.—M.
—*Provincial Medical Journal*, September 2, 1889.

Formula for Uterine Hemorrhage.—The *Revue de Thérapeutique* publishes the following formula for menorrhagia:

R.—Extract. cannabis Ind. . . . gr. vijss.
Extract. ergot. fluid. . . . f ʒj.
Extract. hamamel. fluid. } . . . ad ʒij.—M.
Tinct. cinnamomi } . . . aa f ʒss.—M.

Signa.—One teaspoonful three times daily.—*The Canadian Practitioner*.

Operative Treatment of Bunion.—DR. GEORGE R. FOWLER recently operated after Peterson's method for severe bilateral bunions. As this disease is so painful to the patient, and troublesome to the surgeon, we append a description of the operation, which, in Dr. Fowler's case, was eminently successful: An incision was made from a point on the dorsum of the foot, somewhat below the level of the head of the first metatarsal bone, and just outside of that portion of the tendon of the extensor brevis digitorum which goes to the great toe; this was continued to the bottom of the web between the first and great toes. A similar incision was made on the plantar surface of the foot, slightly to the outer side of the line of the tendon of the flexor longus pollicis. The intervening parts were divided through the whole thickness of the sole of the foot, so as to join the two incisions. The great toe was then strongly adducted, and the external lateral ligament divided, opening the joint. After freeing the soft parts from the neck of the first metatarsal bone with the handle of a scalpel, the phalanx was completely displaced. The great toe was adducted still further, until its inner border lay along the inner border of the foot, its point looking directly backward; the head and neck of the first metatarsal bone, together with a large exostosis constituting the "bunion," were thus freely exposed. The latter, together with the inner half of the articular surface of the former, were sawn off by an oblique cut. The toe was then replaced in its normal position, and drainage provided by a tube in the bottom of the gap. The soft parts were sutured; dressings of sublimate gauze and paper wool, and a splint, were applied to retain the toe in a straight position. The other foot was operated upon in the same manner. In three weeks the patient could walk comfortably, but was kept under observation until the end of the sixth week,

when she was discharged from the hospital cured. After cicatrization it was found that a shoe and stocking, with separate compartments for the great toe, furnished all the support that was necessary.—*Medical Record*, September 7, 1889.

Treatment of Chronic Prostatitis.—MATTHEW BERKELEY HILL, in his lectures at the Royal College of Surgeons of England, "On Some Affections of the Genito-urinary Organs," says that the treatment of chronic prostatitis is very tedious. Few remedies are trustworthy. In the first place, dyspepsia must be cured. The most beneficial tonics are the non-astringent forms of iron, to which nux vomica or strychnine may be added, and belladonna, if micturition during sleep, be a symptom. Ergotine is especially useful when the organ is large, and aching is caused by walking, standing, or railway journeys.

Local Treatment.—Cold sitz-baths are useful when the organ is enlarged, soft, and not tender. The bath should at first be taken at 50° F., once or twice daily, and for one or two minutes only, and the duration gradually increased to ten minutes while the temperature is gradually decreased to 35°. The cold douche on the anus and perineum is also useful. Two to four ounces of cold water as an enema, to be retained in the rectum, is more generally beneficial than the bath. No faith is put in blistering. When the prostatitis is the result of masturbation or excessive venery, the urine is often more or less bloody. To the touch, the organ is little changed. The liquid extract of *salix nigra*, in dose of one drachm, three times daily, has often a marked effect in checking involuntary emissions and preventing the irritation, exhaustion, and neuralgia which occur after them. Topical treatment must be omitted after the mucous catarrh and chronic inflammation are quelled. Coitus may be rendered imperfect or impossible by reason of too speedy ejaculation, in those who have suffered from congested prostate. In these cases the fluid extract of *damiana* has a powerful effect, but cure is almost impossible if continence is neglected. A condition of helplessness, intense neuralgia of the lower extremities following the shortest walks, pains extending from the sacrum to the occiput while at rest, deteriorated digestion, etc., are complained of. The best remedy in such instances is a quiet life, absence of exertion of any kind, and a long sea-voyage. In rare cases chronic parenchymatous prostatitis excites temporary mania which disappears if the physical affection is cured.—*Journal of Cutaneous and Genito-Urinary Diseases*, September, 1889.

Peruvian Balsam in Laryngeal Phthisis.—SCHNITZLER, of Vienna, at a recent meeting of the International Congress for Otology and Laryngology, spoke highly of the local and general treatment of laryngeal phthisis with Peruvian balsam. Internally he prescribes it in the form of pills, or emulsified with cod-liver oil or lipanin. Locally, he uses it mixed with bismuth. subnit. and milk sugar as an insufflation, and equal parts of the balsam and alcohol as an inhalation. If much ulceration exists, he cures the ulcers and applies to the freshened surfaces equal parts of the balsam and alcohol with a small percentage of cocaine. Combined with collodion it serves to protect the diseased surfaces from the pulmonary secretions. With this treatment, according to

Schnitzler, the swelling of mucous membrane diminishes and ulcers cicatrize.—*Munch. med. Wochen.*, No. 40.

Nitrate of Silver in Purpura Hæmorrhagica.—DR. POULET, in the *Bullet. gén. de Thérap.*, reports two cases of purpura successfully treated by the internal administration of nitrate of silver. The first, a child of twelve years, had previously been treated with iron, and by other methods, without result. After one-sixth grain doses of the silver salt, twice daily, had been ordered, he rapidly recovered. The second case, a woman of twenty years, was also quickly relieved with doses of one-eighth of a grain three times daily. Poulet believes that the silver acts in this disease by virtue of its well-known effects upon the central nervous system.—*Thérap. Monatshefte*, September, 1889.

Alopecia Simplex.—DR. E. BESNER recommends the following somewhat heroic but efficient method of treating baldness: The hair is cut short, and the scalp reddened with a mild sinapism. Then, for the following five days, a daily application of equal parts of chloroform and acetic acid is carefully made; and, in addition, an ointment composed of salicylic acid one part, precipitated sulphur four parts, vaseline twenty parts.—*Monatshefte f. Praktische Dermatologie*, October 1, 1889.

The Use of Strophanthus in Children.—DEMME, in the *Rev. Mens. des Mal. de l'Enf.*, reaches the following conclusions upon the use of strophanthus in children:

1. Strophanthus, especially in the form of the tincture, may be given to children after their fifth year; but as in large doses it may suddenly and unexpectedly paralyze the heart, three drops four or five times daily should be the maximum amount administered. Exceptionally, its use is followed by dyspeptic symptoms.
2. The predominant action of strophanthus is to increase diuresis, and consecutively to diminish the phenomena of venous stasis. This effect is produced by an increase of blood-pressure, and is especially evident in connection with lesions of the left auriculo-ventricular valves. Unlike digitalis, it does not produce a compensation of the valvular lesion. In affections accompanied by exaggerated, or even normal, arterial pressure, the diuretic effect of the drug is wanting.
3. Strophanthus also exercises a remarkable influence upon dyspnoeal phenomena, which is due to its action on the respiratory centres. This effect is seen in cases of chronic nephritis, and in other diseases, as bronchial asthma and whooping-cough.
4. While there are close analogies in more respects than one between the effects of strophanthus and digitalis, each drug possesses its own peculiar therapeutic action. Digitalis is indicated in those cases in which it is desirable to obtain with rapidity, a compensation of valvular lesions, augmented blood-pressure, slowing of the pulse, and increased secretion of urine. If digitalis does not produce these effects, they cannot be obtained with strophanthus. On the contrary, when a valvular lesion has been compensated by digitalis, and it becomes necessary to act anew upon the heart, in order to obtain a new increase in blood-pressure and diuresis; when, in addition, dyspnoea becomes an urgent symptom, strophanthus will give excellent results. In such cases the combined action of strophanthus and digitalis is useful.

5. In no case did Demme observe cumulative effects or weakening of the action of strophanthus, even though used for a long time.—*Archives of Pediatrics*, October, 1889.

Treatment of Vomiting of Pregnancy.—In the *Berliner klin. Wochenschrift* for October 7, 1889, Dr. SIGMUND GOTTSCHALK reports a severe case of vomiting of pregnancy in which cocaine and other measures entirely failed, but which quickly yielded to small and frequently repeated doses of menthol. He suggests that further observations be made in this direction, and as menthol is not only a local anæsthetic, but also an antiseptic, it will, probably, be found a valuable addition to the long list of drugs used in combating this troublesome condition. Dr. Gottschalk prescribes about one-third of a grain, in alcohol and water, repeated hourly until the patient is relieved.

Treatment of Herpes Zoster.—Dr. BRAMWELL, in speaking of the treatment of herpes zoster, says: In most cases the administration of a brisk purge at the commencement of the attack is probably advantageous. Arsenic—which, as Mr. Jonathan Hutchinson has pointed out, is a specific in many cases of recurrent herpes—has no influence in arresting herpes zoster. Indeed, it is remarkable that, in some cases, the long administration of arsenic seems to produce the disease.

When the pain is very severe, the administration of opium or morphia, either by the mouth or subcutaneously, is necessitated. The application of a fly blister, or of the actual cautery at a red heat, with the object of producing blistering, but not sloughing, over the point where the affected nerve-trunk becomes superficial, is said, in many cases, to be highly advantageous. Cocaine, in the form of ointment (ten grains to the ounce of vaseline), or a spirituous solution of menthol may also be applied locally. Both are useful for the purpose of allaying the painful sensations which persist after the acute stage of the disease is passed, rather than for the relief of the acute pain which is so often met with in the earlier stages of the affection. Hydrobromic acid is, when combined with syrup of oranges, or infusion of gentian, a pleasant remedy, and useful for allaying the uneasy painful sensations which attend convalescence. During the latter stage, arsenic and strychnine are the most reliable remedies for promoting repair in the affected nerves. The constant electric current seems in some cases to be the most effective means of relieving the very distressing after-pains. If this, with internal remedies, fails, stretching, or, better still, dividing, the affected nerve may be employed.

In order to prevent pitting, great care should be taken to prevent suppuration or rupture of the vesicles. The vesicles may be painted over with flexible collodion, or dusted with a drying powder, such as powdered talc 87 parts, powdered starch 10 parts, and salicylic acid 3 parts. Carbolic oil is also a useful application.—*Studies in Clinical Medicine*.

Chloralamid, the New Hypnotic.—The new hypnotic, chloralamid, is being extensively investigated in Germany, and if the studies of LETTOW, KNY, and others are confirmed, it is certainly a valuable discovery. Lettow, after prescribing the drug in thirteen cases of sleeplessness from various causes, concludes that—

(1) Chloralamid is a very efficacious and useful hypnotic, though no panacea for all cases of insomnia.

(2) The greatest advantage over other hypnotics is that it has no influence on pulse, respiration, or temperature.

(3) After-effects are few; if occurring at all, they consist of slight headache, or a trace of giddiness.

(4) The safe dose for an adult is forty-five grains.

(5) The drug is best given one, to one and a half hours before the desired sleep should commence.

(6) Chloralamid when given as an enema is very reliable.

(7) The hypnotic effect is occasionally prolonged over a part of the following day.

Dr. Eugen Kny, assistant physician to the clinic for mental diseases of the University of Strassburg, published, in the *Therapeutische Monatshefte* for August, 1889, the results of his extensive physiological and clinical experiments with chloralamid. He first gave the drug to a large number of animals, and observed a marked hypnotic effect in nearly all. After the artificially produced sleep was over, the animals felt the better for it, and showed no unpleasant symptoms whatever. In one series of experiments the effect of the drug on blood-pressure was studied, the latter being recorded before, during, and after administration. The result of these experiments was, that chloralamid, in contradistinction to chloral, with which it is in close relation chemically as well as physiologically, does not materially alter the arterial blood-pressure. Chloral frequently causes a decrease of the blood-pressure to the amount of fifty to eighty mm., chloralamid caused only seventeen mm. reduction—i.e., not more than is observed during natural sound sleep. This shows that the drug not only has no toxic influence on the heart, but does not even affect its action to any marked degree. Dr. Kny, after having proved the harmlessness of the new substance on animals, went a step further and tried the drug on patients. He gave it more than one hundred times in thirty-one different cases of insomnia, in some of which he had previously given chloral, so that he had an opportunity of comparing the therapeutic value of the two drugs. Chloralamid had a favorable effect in all cases of insomnia caused by nervous excitation, if not accompanied with intense physical pain; furthermore, in all cases where organic lesions, such as phthisis, heart disease, pleurisy, etc., caused the sleeplessness. As a rule, the sleep was deep, refreshing, and sound; and its duration varied between six and ten hours. In the morning the patients woke with perfectly clear heads, and without any derangement of the digestive organs. Sensation of weight in the head, general malaise, and unpleasant taste in the mouth, complaints quite common after chloral sleep, were, Kny states, never noticed after chloralamid. He considers that another important advantage of the latter consists in its not irritating the mucous membranes. A 10 per cent. solution applied to the conjunctiva did not cause any burning sensation, whilst intense pain is felt by similar application of chloral solutions. Regarding the methods of administration, he recommends to dissolve the drug in wine or other alcoholic beverage. Given in this method, even in patients of very weak constitutions and deranged states of digestion it was followed by no ill effects.—*The Provincial Medical Journal*, October 1, 1886.

Detection of Sugar in the Urine by the Cupro-potassic Solution.—DRS. YVON and BERLIOZ communicated to the Paris Academy of Medicine, during a discussion on diabetes, the results of experiments undertaken some time previously for the detection of sugar in the urine, and on the choice to be made of the various processes described to detect this abnormal element.

The processes and reagents they divided into the following groups:

1st. By *fermentation*. This process, notwithstanding the different contrivances that have been suggested to shorten the time, is very tedious, not practical, and often gives unsatisfactory results.

2d. By the *polariscope*, *saccharimeter*, or *diabetometer*. In using these instruments it is necessary that at least half a gramme of sugar per litre should be present. When this quantity is not exceeded, the presence of sugar can be detected only by a skilful operator possessing a good apparatus.

3d. By *reagents*, of which there are many. Their names and composition are as follows:

- | | |
|-----------------------------------|---|
| 1. Fehling's solution. | Sulphate of copper, neutral tartrate of potassa, soda lye. |
| 2. Bareswill's solution. | Sulphate of copper, acid tartrate of potassa, soda lye. |
| 3. Violette's solution. | Sulphate of copper, Rochelle salts, soda lye. |
| 4. Trommer's reagent. | Sulphate of copper and potassa. |
| 5. Capezzuoli's reagent. | Hydrated blue oxide of copper and caustic potassa. |
| 6. Moore's reagent. | Caustic potassa. |
| 7. Böttger's reagent. | Nitrate of bismuth and carbonate of soda. |
| 8. Mulder's reagent. | Carmine of indigo and an alkaline solution. |
| 9. Neubauer and Vogel's reagent. | Ammoniacal solution of nitrate of silver. |
| 10. Pratesi's reagent. | Bichromate of potassa and an alkaline silicate. |
| 11. Hager's reagent. | Ferrocyanide and caustic potassa. |
| 12. Knapp's reagent. | Cyanide of mercury and an alkali. |
| 13. Penzoldt's reagent. | Diazobenzosulphuric acid and caustic potassa. |
| 14. Loewe's reagent. | Subnitrate of bismuth, glycerine, and soda lye. |
| 15. Almen and Nylander's reagent. | Subnitrate of bismuth, Rochelle salts, solution of caustic potassa. |
| 16. Fischer's reagent. | Phenylhydrazine and acetate of soda. |

Amongst these reagents, and others that have not been mentioned, Fehling's solution, or one of its substitutes, is the easiest and quickest, and one that permits the detection of the minimum traces of sugar. To obtain with it the utmost accuracy precautions are necessary.

Among the various formulæ for a cupro-potassic solution, one described by Mehu has been adopted, rendering it only more alkaline than he advised. It is better

to prepare it in small quantities, so as to renew it often, preserving it in bottles closed with a rubber cork, and kept in the dark. This solution can be so prepared that a cubic centimetre will be entirely reduced by five milligrammes of glucose. Under these conditions any given volume of this solution is entirely reduced by an equal quantity of urine containing five grammes of sugar to the litre. But five grammes to the litre is far from indicating the limit of the sensitiveness of the solution. It simply signifies that to have a complete decolorization of a sample of urine one must use:

1. { One volume of solution.
One volume of urine containing five grammes of sugar per litre.
2. { One volume of solution.
Two volumes of urine containing 2.5 grammes of sugar per litre.
3. { One volume of solution.
Three volumes of urine containing 1.66 grammes of sugar per litre.
4. { One volume of solution.
Four volumes of urine containing 1.25 grammes of sugar per litre.

In qualitative examinations it is not necessary to obtain the total reduction of the solution; it suffices if it is pronounced enough, and if there is an appreciable quantity of oxide of copper precipitated. It is no exaggeration to say that the reduction is very apparent when only a third of the oxide of copper contained in the solution is precipitated. Under these conditions, in varying the quantities of urine from even one to four times that of the solution, a quantity of glucose corresponding to one-half a gramme per litre can be detected. This limit can be still further reduced by evaporating the urine to a third, fifth, or even less, of its original volume.

With certain urines of high densities, rich extractive matter, and strong color, the reduction is often indistinct.

If the proportion of glucose is very low, it is necessary to treat the solution with a volume of urine three or four times greater; and the disturbing influence will increase in proportion. Of all the substances that react upon the cupro-potassic solution, glucose is the one that can be reduced most easily at a temperature much below 100° C., and it will even react in the cold. This property is made use of by heating on a water bath to 85° or 90° C.

For this test it is necessary to clarify the urine, which may be done with subacetate of lead.

If after having treated the urine with Fehling's solution in the ordinary manner, the mixture remains limpid and transparent before and after cooling, the absence of sugar can be confidently assumed. If, on the contrary, the reduction is not sufficiently distinct, and there is doubt as to the presence of glucose, then proceed in the following manner: Mix in a test tube, of about half an inch diameter, two parts of urine and one part of the copper solution, heat the upper part to boiling; if there is sugar in notable quantity there is formed a yellowish coating or deposit, which adheres firmly to the sides of the tube; the mixture assuming at the same time a greenish-yellow color, or the test may be repeated using three or four parts of urine to one of the solution. It is important to have it well mixed. In either case, but particularly in the second, a control test should be made thus:

1. Heat only on a water bath for the reasons we have given.

2. Treat the urine with subacetate of lead and carbonate of soda: the latter in powder so as not to dilute the urine. Under these conditions sugar can be detected in urine containing half a gramme per litre. If there is still doubt as to the presence of sugar, concentrate the urine in a water bath, reducing it to a volume small enough for the glucose which it contains to react sharply. It must be clarified with subacetate of lead, then evaporated to a syrupy consistence and the residue taken up with alcohol. The red or yellow decolorization of the copper solution will not alone determine the presence of sugar. It is necessary to observe a characteristic reduction by the loss of transparency in the mixture, and the appearance of a precipitate of oxide of copper, which may be either red, yellow, or black. A good way to verify a true reduction is to hold the tube before a bright flame. If the solution becomes opaque and obscures the light, it contains a precipitate.

The presence of sugar in normal urine has been sought in vain by the authors.

Sugar in urine is not met with as often as one would think. Among 10,650 suspected urines that they examined, but 2777, or 26 per cent., contained sugar.

The phenylhydrazine test they considered to be one of the least reliable. When urine contains only a small quantity of sugar, it must stand from twelve to twenty-four hours before the crystals of phenylglycosanone are formed; and, what is more serious, the speakers had obtained so-called characteristic crystals in urines which in their judgment contained no sugar.

The conclusion of these experimenters is that the cupro-potassic solution, used with the precautions pointed out, appears to-day to be the quickest and the most exact reagent for detecting the presence of sugar in urine. —*Archives de Médecine Experimentale d'Anatomie et Pathologique*, No. 5, September 1, 1889.

Oxygen in Leukæmia and Chlorosis.—In *The American Journal of the Medical Sciences* for October, 1889, Drs. DA COSTA and HERSHEY report their results in the treatment of two cases of splenic leukæmia, and two of chlorosis, with inhalations of oxygen, and though it is manifestly unwise to draw positive conclusions from so few cases, the improvement in all was so rapid that the method should certainly be given a fair trial in every case of grave anæmia.

Their first patient was a boy of thirteen years, with general weakness, an enlarged spleen, and blood corpuscles numbering 2,350,000 red, to 320,000 white per c.mm. Iron, arsenic, trinitrine, and other measures had been used without effect, the patient was steadily growing weaker. Improvement began immediately upon the inhalation of from twenty to thirty litres of oxygen daily, and in two months the patient was able to resume work. One month later, his red corpuscles numbered 4,850,000, and the white were so nearly normal that a count was not made.

The second case, a man of thirty-five years, had probably been leukæmic for several years, and had also suffered from polyuria. Customary treatment was followed by no benefit. When inhalations of oxygen were commenced the patient was exceedingly weak, with œdematous feet and legs, dyspnoea on slight exertion, profuse

watery diarrhœa, and a temperature of 102.3°. His spleen was enormous, extending two inches beyond the umbilicus. The red corpuscles numbered 1,440,000, were pale in color, and did not form rouleaux. The leucocytes were 1,120,000 in number, and of various sizes and shapes. Two days after ten litres of oxygen three times daily was begun, the distorted and large leucocytes had entirely disappeared, and the red corpuscles formed rouleaux rapidly. At the end of a week œdema had almost disappeared, the temperature had fallen to normal, the white corpuscles had decreased nearly one-half, while the red had increased nearly two-thirds. With the exception of a short period, during which, from indiscretions of the patient, the white corpuscles increased and the red diminished, he has steadily improved in every respect, the spleen being markedly reduced in size. From the time that oxygen was begun no drugs were given other than a mild hypnotic at night and, for a few days, Basham's mixture.

In the two cases of chlorosis, oxygen was used as an adjunct to iron, and the effects, though not as striking as in the leukæmics, were excellent.

At present the authors have a case of pernicious anæmia under the oxygen treatment, a report of which will be awaited with interest.

Corrosive Sublimate Hypodermically.—In controlling late syphilitic manifestations, such as gummata, nocturnal headache, and periostitis, Dr. LANGDON, of Cincinnati, has found the hypodermatic administration of corrosive sublimate satisfactory. He plunges the needle deeply into the muscular tissue, usually of the upper gluteal region. Some smarting follows the injection, but he has never seen an abscess produced. His solution is prepared by dissolving one part of the sublimate in three or more of glycerine, and diluting with water to the desired strength. To avoid precipitation, the solution should not be kept long. —*The Cincinnati Lancet-Clinic*, October 12, 1889.

Creasote for Diseases of the Air-passages.—Additional testimony as to the value of creasote in diseases of the throat, bronchi, and lungs is furnished by Dr. WILLIAM PERRY WATSON, who, in the *Virginia Medical Monthly* for October, 1889, reports his results in fifty cases. His conclusions are that, while creasote will not cure all cases of consumption, yet it will benefit nearly all; that in cases with simply consolidation before the "breaking-down" process begins, it seems to arrest the diseased process, and further investigations will be required to ascertain its permanent utility, although similar cases observed for a long time by Robinson and Flint would convince us that the improvement was lasting.

In acute and chronic diseases of the bronchi, it was very beneficial, cases of the former being quickly cured, while those of the latter were improved sufficiently for them to leave the hospital in a short time. Another very important fact noticed in these experiments was, that the more constant the inhaler was worn, and the internal mixture taken, the more marked was the improvement; so that Dr. Wain was satisfied that, to obtain the full benefits of this treatment, the system should be saturated with the creasote as rapidly as possible; and while he would not expect miraculous cures, yet he believed it is, combined with good hygienic and dietetic

surroundings, the most promising treatment of consumption in the laboring classes we yet possess.

Dr. Watson in most cases used creasote both as an inhalation and internally. For inhaling he prescribes:

R.—Creasoti
Sp. chloroformi } āā equal parts.—M.
Alcoholis }

Sig.—Five to twenty drops to be used in the inhaler every three hours.

Or,

R.—Iodoformi gr. xxiv.
Creasoti ℥ iv.
Ol. eucalypti ℥ viij.
Chloroformi ℥ xlvij.
Alcoholis } āā q. s. ad. f̄ss. —M.
Ætheris }

Sig.—Five to twenty drops to be used in inhaler every three hours.

For internal use:

R.—Creasoti ℥ xxiv.
Glycerinæ f̄j.
Spts. frumenti ad. f̄ij.—M.

Sig.—Half a teaspoonful every three hours.

Creasote.—DR. J. E. NEWCOMB prescribes creasote for pulmonary phthisis in adults in the following mixture:

R.—Creasoti } āā f̄ijij.
Tincturæ capsici }
Mucilago acaciæ f̄ss.
Aquæ ad. f̄ijiv.—M.

Sig.—Dose, one teaspoonful well diluted.

The proportion of creasote may be reduced or increased, according to the age or toleration of the patient.—*College and Clinical Record.*

Formula for Migraine.—DR. HAMMERSCHLAG publishes, in the *Allgemein medicinische Centralzeitung*, the following prescription which he has found valuable in migraine:

R.—Caffein citrat. gr. jss.
Phenacetin gr. iij.
Sacchar. lacti gr. v.—M.

Ft. Pulv.

Such a powder may be taken every two hours until the patient is relieved.—*The Provincial Medical Journal*, October 1, 1889.

Chronic Gonorrhœa.—DR. WILLIAM FLEINER recommends the following injection for chronic gonorrhœa:

R.—Argent. nitrat. gr. j.
Lanolin gr. i.
Ol. olivæ gr. xx.—M.

The nitrate of silver should be dissolved in a minimum amount of water before incorporating with the other ingredients.—*Münchener medicinische Wochenschrift*, No. 40.

Tuberculosis in Children.—According to the *Medical Press and Circular*, DR. JACOBI believes that arsenic is a remedy of much usefulness in the treatment of tuberculosis in children, but it is necessary only to administer the drug in small doses. A young patient, for example,

could take every day, and that for weeks or months, two drops of Fowler's solution. This dose should be diluted in a sufficient quantity of water, and given three times a day after meals. If any signs of saturation supervene, the dose should be withheld for a time. A second remedy of almost equal value in these cases, is digitalis. Under the influence of this drug the contractility of the heart muscle is strengthened, and, consecutively, the arterial pressure is increased, and the rapidity of the pulse diminished. The general effect of the increased arterial pressure is to favor the nutrition of the tissues. The choice of the particular preparation of the drug is a point of some moment. Oftentimes the infusion and the tincture are badly borne by the stomach; digitaline, on the other hand, is an inconstant preparation; thus the fluid extract is most to be recommended, either in pills or in capsules, and this can be dispensed with other drugs, such as iron.—*Cincinnati Lancet-Clinic*, October 26, 1889.

Poisoning from the External Application of Chromic Acid.

DR. J. WILLIAM WHITE reports the following case in the *University Medical Magazine* for November, 1889:

A young woman was suffering from non-specific vegetations covering the labia majora and the nymphæ, extending up toward the pubes and down toward the anus, and several inches in thickness. The vegetations had been treated for two weeks with cold poultices, after the method of Peters, of Prague. No improvement following, Dr. White ordered the usual application of chromic acid solution, of the strength of one hundred grains to the ounce of water, directing the neighboring parts to be protected and an excess of the acid to be avoided. The application was made on the afternoon of the same day. The acid solution was applied by means of a tuft of absorbent cotton, about a half ounce of the liquid being used. The vagina and anus were carefully protected by tampons of cotton soaked in carbolyzed oil. After coming from under the anæsthetic she complained of a burning pain referred to her vulva; this continued through the night, during which time she was restless, and frequently called for water. About 4 A. M. she rose to urinate, and fell; she was assisted to bed and slept until 7 A. M. She continued thirsty but not feverish, all the morning, complained of nausea, and refused her food. When next seen, at 3 P. M., she was pale, with cold extremities, rapid pulse, complained of pain in the left hypochondriac region, and expressed fear of approaching death. Temperature in axilla 99°. Although active treatment was instituted her condition did not improve, and she died at 6.30 P. M., twenty-seven hours after the application of the acid. Intellection was preserved to the last.

At the autopsy the cause of death was not evident, but portions of the viscera submitted to Dr. John Marshall for chemical examination showed that the kidney tissue and the liver tissue both contained chromium, most likely as sodium chromate—a substance poisonous in doses of from one to three grains. The chromic acid was absorbed, and entered into combination with the sodium of the sodium carbonate of the blood to form sodium chromate. This is the most probable explanation of what occurred.

[It seems not impossible that the prolonged poulticing may have had some influence in the unusual absorption of the chromic acid.—ED.]

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HYPNOTISM IN THERAPEUTICS.

THAT hypnotism is assuming a certain position in rational therapeutics, can no longer be denied by the unprejudiced, though its value is difficult to determine, and, being in a transitional stage, its future is impossible to prophesy. For more than a century, empirics have claimed that through it marvellous cures resulted, but, until the time of Braid, its literature was a mass of such mystical theories and absurd statements, that to the rational mind intentional imposture seemed the only explanation. Braid, of Manchester, was the first to study the subject in a spirit approaching the scientific, and to him is due much of the modern revival of interest. His conclusions, that this curious psychological condition could be explained without the aid of subtle magnetic fluid or mysterious force, were announced shortly after the Paris Academy of Sciences had autocratically declared the subject unworthy of further discussion, and at first excited little comment. Contemporaneous with Braid was Esdail, of Calcutta, who, utilizing the hypnotic state as an anæsthetic, performed more than six hundred surgical operations on patients under its influence. For a time, little credence was placed in his statements, but a committee appointed by the Indian Government finally substantiated them in every particular.

Systematic use of suggestions during hypnosis began with the so-called Nancy school of physicians, who, represented by Bernheim and Liébault,

claim not only to cure all manner of ailments, but, with the assurance of the charlatan Mesmer himself, to elevate depraved characters and exorcise vicious propensities. The possession of such powers, however devoutly to be wished, is so entirely at variance with human experience, that the statements of this school are generally ridiculed and discredited. Charcot, who has added much to our knowledge of hypnotic phenomena, has studied it as a curative agent less than Voisin and other physicians of the Salpêtrière. Voisin has obtained indubitable cures of hysteria, hystero-epilepsy, and probably of dipsomania by means of hypnotic suggestions.

Among the insane he also claims excellent results: quieting mania, removing hallucinations, producing natural sleep, and controlling obstreperous patients. His assertion, that 90 per cent. of the mentally diseased are susceptible to hypnosis, opens his results to criticism, for it is incredible that so large a proportion can be induced to submit to the necessary procedures, and force would here be entirely useless. It is at least suggestive, that his most brilliant results have been in the treatment of French women, who are notoriously hysterical and imaginative. Furthermore, Voisin and other enthusiasts invariably lose sight of the dominating influence of a strong intellect over a weaker, and forget how much can be accomplished by excitation and skilful guidance of the imagination. Forel, another apostle of suggestive therapeutics, disagrees with Voisin as to its wide applicability in the treatment of insanity.

The most recent contribution to the literature of hypnotism in therapeutics, is from the pen of von Corval (*Therapeutische Monatshefte*, September, 1889), who publishes a long list of diseases in which he has seen suggestive therapeutics productive of remarkable results. If his statements could be unreservedly accepted, we have in the method almost a specific for acute alcoholism, neuralgia of all varieties, lightning pains of tabes, epilepsy, deafness, tinnitus aurium, asthma, and muscular rheumatism. Acute alcoholism he finds invariably benefited after a single sitting, the appetite and sleep returning, nervousness disappearing. He does not seem convinced that relapses can be prevented, but believes them less frequent than with the ordinary methods of treatment. For the relief of neuralgia he considers it superior to morphine, with more or less permanent effect. The convulsions of epilepsy, according to this writer, are reduced in frequency or altogether prevented. Deafness and tinnitus are

improved, if anatomical changes are not too great. The paroxysms of bronchial asthma are quickly relieved, the dyspnoea disappearing, and the patient falling into a comfortable sleep. Corval's results read like the advertisement of a patent medicine, and it is utterly impossible to accept them in their entirety. It is just such enthusiastic and sweeping assertions that prejudice the profession against the method as a whole, and keep it in disgrace.

Notwithstanding his apparent overstatement of facts, Corval's deductions are quite dispassionate. He believes that in suggestive therapeutics we possess a method of treatment which is in some cases curative, in others simply palliative; that with judicious selection of cases, and avoidance of unnecessary experiments, it is no more dangerous than many other curative means; that the indications and contra-indications being as yet imperfectly defined, its use should be confined to those cases in which the usual treatment is unsatisfactory or dangerous—replacing morphine in neuralgia and chloroform as an anæsthetic; that the method should be studied earnestly and scientifically; and, finally, to prevent abuse, its use should be confined, by law, to physicians.

As an anæsthetic it is extremely doubtful if hypnotism will ever replace chloroform or ether, as it is impossible to determine what individuals are susceptible, and every case must be an experiment. In hysteria and functional diseases of hysterics will its true field probably be found, though even here it is doubtful if its use becomes general. It is not to be forgotten that hypnotism has been followed by injurious effects: epilepsy has grown more severe, hysteria has been produced in the previously well, and permanent hysterical contractures have developed. In several instances it has been impossible to arouse patients from the hypnotic sleep for several weeks.

A few words on the methods by which the hypnotic state is induced may not be out of place. Braid's process, which is the one usually adopted, consists in requiring the patient to stare at any small, bright object held just above the bridge of the nose. This causes strong upward convergence of the eyes and a strain upon the ocular muscles, which assists in fixing the subject's attention. It is also essential that the surroundings be quiet, and that, as far as possible, the patient be convinced of certain success. After a variable length of time, in a susceptible person, the eyes close, when the

operator tells him in a positive voice that they cannot be opened. If they remain motionless he is hypnotized, and the suggestions or commands deemed advisable are now given. With many individuals frequent attempts on succeeding days will be required, before success is attained, but with perseverance, probably more than one-third of all persons can be so influenced. The so-called "passes," or strokings, are apparently attended with no greater success than Braid's method, and while savoring more of charlatanism, possess, nevertheless, certain advantages over the employment of the fixed stare at a bright button, in that they are made by the operator, and do not require obedience on the part of the patient. This is particularly true in persons who are insane or unruly.

THE TREATMENT OF URETHRAL STRICTURE.

In the London *Lancet* for September 14, 1889, is an admirable clinical lecture upon "Stricture of the Urethra and its Treatment," delivered by Mr. Walter Rivington, Surgeon to the London Hospital. One or two points upon which the lecturer dwelt, although neither of them might at first sight attract attention, are, nevertheless, of grave practical importance. The first of these points is that, in treating a stricture, the utmost care should be taken to avoid making a false passage. This injunction may appear trite, but unfortunately it is a necessary one. There is, probably, no surgeon of wide hospital experience who has not been called upon to deal with cases in which this unfortunate accident has occurred. In most instances it has occurred during efforts at catheterization for the relief of retention of urine resulting from alcoholic or sexual debauch, in a case of long-standing and neglected stricture. The stricture which, prior to the debauch, may have permitted the urine to pass, if only by drops, is occluded by congestion of the mucous membrane and muscular spasm. It is, in fact, for the time being at least, practically impermeable. In spite of this fact, however, attempts are made to get a catheter to go through it, and, one after another, successively smaller instruments are called into service until, finally, the smallest metallic catheter is passed down to the anterior face of the stricture. After prolonged efforts, something yields, the instrument advances, but not within the urethral walls—a false passage has been made; the congested, softened, unhealthy mucous membrane has been penetrated, and that without the employment of any consider-

able force. From this moment a new source of danger is added to the patient's already serious condition, and a vexatious obstacle is put in the surgeon's way.

Bearing in mind the fact that retention of urine may exist for twenty-four hours before danger of rupture of the bladder becomes imminent, it will be seen that very often there is really no immediate necessity for resorting to the use of a catheter. Even should there be imperative demand for speedy relief, we have the resource of suprapubic aspiration of the bladder. Mr. Rivington's advice that in dealing with cases of retention, the physician should, wherever practicable, abstain from catheterism, "especially from the employment of the finer instruments," we consider sound. To use his own language, when speaking of a case applying at a hospital: "If a No. 5 or 6 (English) silver or flexible olivary catheter can be gently passed, well and good; if not, the patient should be taken in, ordered a warm bath, a drop or two of croton oil, or a dose of house medicine, and afterward some tincture of opium or a similar sedative, whilst warm fomentations are applied to the abdomen. Retention of urine generally yields to these measures within twenty-four hours." This latter statement will be supported by practical surgeons. It will be seen, therefore, that one way to avoid making false passages is to be tardy in the employment of instruments capable of doing mischief.

Another point dwelt upon by Mr. Rivington is the value of rest in the treatment of stricture. Practical experience has established so clearly the beneficial action of rest in the recumbent posture in cases of tight stricture, that it is scarcely necessary to allude to it; but it is well to bear in mind the value of preceding a period of active treatment with one of wholesome inactivity.

Such observations as these are of the greatest use to those to whom they were originally made—students of medicine—and are not without value to the general practitioner, and while the surgeon who is skilled in the treatment of genito-urinary diseases may, for the moment, think such points so obvious as not to need comment, he will, upon reflection, realize their import to others less familiar with the subject than himself.

THE opening meeting of the D. Hayes Agnew Surgical Society of the University of Pennsylvania will be held in the University Chapel, Saturday, November 2, 1889, at 8 P.M. Addresses will be made by Dr. William Pepper and Dr. D. Hayes Agnew, President Ex-officio.

REVIEWS.

HAND-BOOK OF MATERIA MEDICA, PHARMACY, AND THERAPEUTICS. Compiled for the use of students preparing for examination. By CUTHBERT BOWEN, M.D., B.A. Duodecimo, pp. 366. F. A. Davis, publisher; Philadelphia and London, 1889.

THE author's object, as stated in his preface, has been to furnish to the student a book containing, in a compact form, the questions and answers generally encountered in coming up for examination. That the volume is not intended as a text-book, the author himself appreciates.

The general plan is similar to that of like manuals already at the student's command. The book opens with some good practical remarks upon and rules for proper prescription-writing, dosage, and administration of remedies. Following this, the author gives a very full list of drugs chemically and pharmaceutically incompatible. The remainder of the volume is occupied by questions and answers relating to the source, nature, preparations, doses, physiological actions and uses of the various drugs. A good feature of the book is the presentation of a number of typical prescriptions containing each drug as it is mentioned.

The author supports the use of the term hypodermatic as opposed to hypodermic, but throughout the volume uses the latter word. It is unfortunate that none of the more recent hypnotics and antipyretics have been mentioned. This, of course, deprives the book of much of its value as an aid to students.

Although, with the above mentioned exceptions, most of the drugs are fully dealt with, there are many important remedies, notably hyoscin, that have received but scant mention.

The form in which the book is prepared is attractive, but its range of usefulness is strictly limited to the particular class for whose benefit it was written.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. Volume I. Number 2. Octavo, pp. 267. New York: William Wood & Co., February, 1889.

CONSIDERABLY more than one-half of this, the second number of the series, is devoted to an exhaustive treatise by Dr. William Japp Sinclair on Gonorrhœal Infection in Women. The first two chapters are mainly historical, showing how this important subject has been neglected, yet how frequent the disease is in females, and by what serious sequelæ it is followed. Dr. Sinclair does not seem to think Noeggerath's statement exaggerated, that in New York eighty per cent. of all men have had gonorrhœa, ninety per cent. of whom remain uncured, and that ninety per cent. of women marrying these men are infected. Have more than *one-half* of the women in New York some disease the result of gonorrhœa? We hope not, and believe not.

Neisser's gonococcus is unreservedly regarded as the causation, and its presence a pathognomonic sign. "If gonococci are present in the discharge from an inflamed mucous membrane the discharge is of gonorrhœal origin." "Without the gonococcus there is no gonorrhœa." Dr. Sinclair virtually denies that urethritis in the male is ever caused by non-specific discharges in the female. The remaining chapters are devoted to the

complications, uterine, tubal, ovarian, and urethral, of gonorrhoea in the female, to prophylaxis and to treatment.

The whole article represents an immense amount of research and reflects the most advanced medical thought. Following this essay are three lectures of Dr. Thomas Grainger Stewart on Giddiness, a subject which is carefully reviewed in detail as a symptom of cerebral, aural, and gastric disturbances. Dr. Stewart's profound knowledge and happy style make these lectures valuable alike to the student of nervous diseases and to the general practitioner.

The remaining monograph—A Critical Study of the Clinical Value of Albuminuria in Bright's Disease, by Dr. Pierre Jaenton—is a fair representation of the latest views on this much-discussed subject. An extensive and valuable bibliography is appended to several of the chapters.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS. Vol. II., No. 2. ON THE PREVENTIVE TREATMENT OF CALCULOUS DISEASE AND THE USE OF SOLVENT REMEDIES. By SIR HENRY THOMPSON, F.R.C.S., M.B.

SPRAINS: THEIR CONSEQUENCES AND TREATMENT. By C. W. MANSELL MOULLIN, M.A., M.D.

IN the article by Sir Henry Thompson, given us in this number of the so-called *Monographs*, the advanced and logical idea of the day in respect to the treatment of stone in the bladder is clearly stated. Careful reading of this paper impresses one with the fact that the old proverb, "an ounce of prevention is worth a pound of cure," obtains more largely in relation to such troubles than is generally supposed, and we learn that the greatest of living genito-urinary surgeons relies not upon the solution of stones already formed, but upon the measures directed to the systemic states which predispose to their formation. His idea in this respect is, briefly, to prevent their development, and this failing, to resort to surgical relief. Not one case in a thousand has been cured in the past by the methods resorted to for the solution of the stone.

By far the largest part of the volume is, however, taken up with the article on "Sprains," written by Moullin. This is the most exhaustive paper concerning these rather common accidents that we have ever seen, and is also one of the clearest and most intelligent in its dealing with the subject at hand. The anatomy of the parts involved, the conditions of the muscles predisposing to such states, the symptoms present after the reception of the injury, and, finally, the sequelæ so commonly seen after ruptures of ligaments, are all taken up and considered with great thoroughness and exactitude. The chapters on treatment are extremely well written and practical, and are worthy of the series which they so well represent.

THE RADICAL CURE OF HERNIA BY MEANS OF THE BURIED ANTISEPTIC ANIMAL LIGATURE. By HENRY O. MARCY, A.M., M.D., LL.D. 12mo., pp. 251. Detroit: George S. Davis, 1889.

THIS number of the "Physician's Leisure Library," which has just been received, is presented in the same

attractive shape as its predecessors. It is a very complete monograph upon the various forms of hernia, and the different methods employed for their radical cure, from the earliest times to the present day. The author claims no originality in the performance of his operations, but simply details the results attained and the conclusions arrived at during a careful study of hernia, and in an extensive operative practice of eighteen years.

The classification of herniæ in the introductory chapter would, from its multiplicity of terms, tend rather to confuse than aid the average reader, for, among other things, we cannot conceive that the terms "supra-pubian" or "infra-pubian" convey any more distinct idea than do inguinal and femoral. The anatomical relations of the structures involved, in the various forms of hernia, are exhaustively considered, and the illustrative plates are well selected.

After an elaborate series of tables, showing the relative frequency of the occurrence of hernia, the author proceeds to give a careful *rèsumé* of the radical operation, discussing with great minuteness the indications for it, the manner of preparing both patient and operator, the actual surgical procedure, and the necessary after-treatment. The methods of ligation of the sac and closure of the ring are clearly and concisely described.

Dr. Marcy has evidently spared no pains in collecting and carefully arranging the views of the best surgeons, both in this and other countries. His style is easy yet forcible, and the reader cannot fail to be interested by his masterly treatment and clear exposition of the subject.

SOCIETY PROCEEDINGS.

NEW YORK NEUROLOGICAL SOCIETY.

Stated Meeting, October 1, 1889.

THE PRESIDENT, G. W. JACOBY, M.D.,
IN THE CHAIR.

DR. A. A. BOYER presented a case of

LESION OF THE PONS,

with a history, of which the following is a brief synopsis:

C. W. B., aged forty-five, syphilitic, in June, 1888, while at work, felt a sudden sensation at the occiput, as though he had been shot. It was immediately followed by intense headache and nausea. Later, vomiting and insomnia became prominent symptoms, lasting for six weeks. There was then an interval of two weeks without these symptoms, after which they returned in greater severity. On August 14th, his left thigh became cold and numb; which sensations, in a few hours, extended up the trunk, left arm, and left face. In the morning there was anæsthesia with paralysis of the entire left side of the body. When first seen, eight months later, he had a hemiplegic gait, inco-ordination and paralysis of the left arm, good equilibration, paresis of the left leg, drooping of left side of mouth, and left-sided hemianæsthesia and hemianalgesia. The lesion would, therefore, seem to be located in the pons, to the right of the median line, above the line of Gubler, and involving the fillet, the reticular formation, and pyramidal tract. The speaker thought a lesion here would be high enough to produce paralysis of the facial muscles of the opposite side, and

low enough to leave unaffected the ocular nerves. He believed the most reasonable theory as to the nature of the lesion was thrombosis resulting from obliterating endarteritis or hemorrhage.

DR. BIRDSALL saw no necessity for assuming a lesion of the pons to explain the symptoms, which seemed to be wholly unilateral. He usually expected something particularly characteristic in pontic lesions, such as alternating paralysis. He thought a capsular lesion would account for all the symptoms in this case, the absence of other pontic features strengthening such a view.

DR. STARR agreed with Dr. Birdsall as to the localization of the lesion. He believed the case to be one of ordinary hemiplegia, with a lesion in the internal capsule. Unless there were alternating paralysis, or some other characteristic symptoms, it was unnecessary to locate the disease in the pons.

DR. BOYER in closing the discussion said he located the lesion in the pons because there was no loss of consciousness at the onset of the attack, although decided and varied paralyses immediately followed. In his opinion this pointed strongly to a minute lesion, which only in the pons could produce such marked symptoms. The inco-ordination now remaining after the disappearance of most of the motor symptoms indicated a lesion of the fillet or of the commissural fibres in that vicinity.

DR. L. C. GRAY then read a paper entitled,

THE CURABILITY OF LOCOMOTOR ATAXIA.

Speaking first of the modern knowledge of the pathology, he then went into the question of histology. He regarded the original focus of disease as a cellular or inflammatory alteration of the cord, sometimes possibly a meningitis, from either of which the ascending secondary degeneration started. Erb and Schultze had reported a case of indubitable locomotor ataxia, in which the cord was examined microscopically, and in which the symptoms had disappeared almost entirely for some twelve years. He did not believe there was a cure on record, although it is unquestionable that many cases of great improvement had been reported, more especially among those with a history of syphilitic infection.

Dr. Gray narrated a case of his own, illustrating the association of locomotor ataxia with general paresis, the mental hebetude of the latter disease causing an apparent improvement in the former.

DR. DANA said that we had changed our conceptions as to the variations in clinical types and as to the pathological lesions of locomotor ataxia. Probably ninety per cent. of our cases are typical and answer to the classic descriptions of the disease, but there is a minority of cases which have non-typical manifestations, types with optic atrophy, latent, spinal and spastic symptoms, with peripheral lesions, etc., and the prognosis varies in these forms. For instance, in the spastic variety, the prognosis is not bad, but exceedingly so where there is rapid emaciation of the lower extremities. He had recently examined his notes, and the results of treatment in 56 cases, which were as follows:

10 very much improved	(3 syphilitic);
6 improved	(4 syphilitic);
14 stationary	(3 syphilitic);
13 progressive	(6 syphilitic); 2 fatal;
10 doubtful, or unknown.	

He believed locomotor ataxia to be a degenerative disorder, affecting nerve fibres primarily, not beginning at a single focus, but at different places at various times, and to cure the disease we should have to discover a drug which would stop this degenerative process. As to suspension, he had tried it in twenty-two cases, with six hundred suspensions, since last April. Of these, four were much improved, six improved, six unimproved, and six discontinued the treatment.

DR. BIRDSALL coincided with the speaker in the opinion expressed as to the incurability of the disease. In one of his own cases, a syphilitic, ataxia had disappeared for nine years, although the patient now suffered again from various crises, gastric and laryngeal, and some cerebral symptoms. For five years the active symptoms had been referred to the trunk and upper extremities. He had seen other very similar cases and could speak of none as cured.

He had tried suspension in a few cases, with no favorable results, though he did not deem it wise to cast it altogether aside.

He had seen injurious effects from large doses of potassic iodide, and, in his opinion, tabetic cases could not tolerate this drug as well as others.

DR. STARR said, with regard to the differential diagnosis between peripheral and cerebral cases, we first judge from the order in which the symptoms occur, as well as from the symptoms themselves, which in the former class developed more rapidly than in the latter.

Some seven years ago, Dr. Austin Flint read a paper in this Academy upon the self-limitation of phthisis, and a description similar to his might apply to locomotor ataxia. It is possible that the sclerosis of the cord may be a protective process, an effort of nature to arrest or provide against the effects of disease; indeed, a pathologist of this city has taught for two years that connective tissue is always thrown out by nature as a defence. Thus, locomotor ataxia might be a self-limited disease like phthisis in a few instances.

His own records showed 25 cases seen in the last four years, 17 of which are carefully detailed. In 9 of the 17 there had been various periods of non-progression, while in 8, with similar treatment, there had been steady advance. He thought specific treatment worthy of trial in patients with a syphilitic history, but he had little faith in its efficacy, as in his experience it afforded less benefit in locomotor ataxia than in other specific nervous affections. He usually employed the English treatment—small doses of arsenic and biniodide of mercury.

Among 13 patients treated by suspension at the Vanderbilt Clinic, tabulated by Dr. Peterson, there were 7 cases of locomotor ataxia. In 2 cases only had there been distinct improvement, and none at all in 4, while in 2 the results were injurious, the suspension producing syncope, nausea and vomiting, severe pain, and enuresis at different times.

DR. SACHS had observed in two cases the disappearance of the cardinal symptoms of locomotor ataxia, without treatment. The first was as follows:

B. L., merchant, aged forty-eight, seen August 18, 1886. His symptoms were retching, dizziness, numbness of arm, unsteadiness in walking, absence of knee-jerk, slight swaying with closed eyes, and a feeling as though his drawers were too tight around the waist. Dr. Sachs

had made the diagnosis of *tabes incipiens*, though with some hesitation, for the general condition of the patient was very good. After two months a slight knee-jerk had returned on the right side, and later the left was recovered. Three years had now elapsed since the observation of these symptoms, and the man was in perfect health at the present day. He believed it to have been a functional derangement of the cord, due to overwork.

In syphilis a simple specific spinal meningitis might simulate a posterior sclerosis, and should be borne in mind when cases improve under treatment.

Suspension he had found unsatisfactory in ataxia, but in spastic cases, such as myelitis, it seemed to him of more use.

DR. WAITZFELDER had used suspension in a case of spastic paraplegia, which became worse, but he had noted considerable improvement in gait in several ataxics who were subjected to this method of treatment.

DR. GRAY then closed the discussion. He said that Fournier's and Rumpf's specific cases showed great improvement under treatment, but such had not been his own experience. He believed that in certain cases there would be great difficulty in distinguishing peripheral from central symptoms. As to self-limitation, mentioned by Dr. Starr, he saw no analogy between *tabes* and *phthisis*. In treatment he preferred to follow French authors and employ inunction in specific cases, rather than potassic iodide, for the results were better in his experience.

NEW YORK ACADEMY OF MEDICINE.

SECTION ON THEORY AND PRACTICE OF MEDICINE.

R. C. M. PAGE, M.D., CHAIRMAN.

Stated Meeting, October 15, 1889.

DR. A. JACOBI read a paper on

CHRONIC PERITONITIS, WITH SPECIAL REFERENCE TO THE DIFFERENTIAL DIAGNOSIS OF SOME OF ITS VARIETIES.

Having enumerated a number of the causes of peritonitis, Dr. Jacobi said that perhaps the most frequent was a preceding attack. In autopsies upon cases of perityphlitis, he did not remember one without adhesions and other evidences of previous inflammation, and foreign bodies in the vermiform process were, in his opinion, seldom, if ever, a cause of the disease. Both enteritis and ulceration, acute or chronic, were also the causation in some cases, the inflammation extending by continuity; thus it was that a simple diarrhoea might become an enteritis and terminate in peritonitis.

Old local peritoneal adhesions over a cicatrized ulcer of the stomach or intestine, were soft and prone to rupture, and this was probably a frequent cause of acute peritonitis in persons apparently perfectly well. In diagnosis, chronic peritonitis was frequently overlooked, the intestines becoming glued together, or floating kidneys being fixed by adhesions without recognizable symptoms or signs. In chronic peritonitis, respiration was not necessarily accelerated, particularly if the inflammation was in the pelvis.

Vomiting was occasionally present, but perhaps not as frequently as in other conditions, and was often entirely absent even in acute peritonitis. Either constipation or

diarrhoea might be present. A horizontal position might be painful, but this was also not infrequently the case in ordinary colic from accumulated gas, though in the former condition the patient was more likely to remain quiet than in the latter. Tumidity might be observed, but was often difficult to distinguish from the fat, which is so common in this situation, or from hysterical tympany, or distention from habitual constipation. The superficial abdominal veins were more frequently dilated in chronic peritonitis than in any other condition excepting certain hepatic diseases. Inspection might also show swellings, corresponding to intestinal convolutions, and palpation might reveal hard or soft exudations in the form of nodules or cakes, which consisted of organized lymph, thickened omentum, or a mass of intestines glued together. Fluctuation would indicate the presence of fluid more certainly than percussion dullness, which might be rendered uncertain by the presence of adhesions, retaining the distended gut between the abdominal walls and an accumulation of fluid. A chronic peritonitis may be sometimes discovered by placing the patient on his back, and having him alternately flex and extend his thighs; while doing this, pressure of varying depths is made by the physician, who may in like manner discover a painful area. In many cases, however, a better method is to make deep pressure with the fingers or palm, and on suddenly removing them a painful spot may be detected; the pain being caused by a sudden change in the position of the bowels. Every changed position of the intestines or other abdominal organs, may cause pain: hence, in adhesions to the stomach, pain may be felt after a full meal; pain several hours later, may indicate adhesions to the colon; pain on coughing, or quickened inspiration, a perihepatitis; pain at the end of micturition, a pericystitis. Pain, of varying degree and duration, was, in Dr. Jacobi's opinion, a very frequent symptom in chronic peritonitis. The seat of the pain would vary with the location and extent of the lesions. Extensive pelvic peritonitis might give rise to pain only during defecation, sexual intercourse, or micturition. The pain of pericystitis resembled that of vesical catarrh in coming on when the bladder was about one-half emptied, but differed in being more localized above the pubes, and more readily detected by pressure. In some cases the pain of chronic peritonitis could not be distinguished from that of flatulent colic; indeed, peritonitis by interfering with peristalsis, may cause not only flatulence but twisting of the gut and stenosis.

The remainder of Dr. Jacobi's paper was devoted to the subject of *tabes mesenterica*. That there were several distinct varieties of this disease he thought was proven by the histories and symptoms of different cases. Besides the simple infiltrations of the mesenteric glands causing *tabes mesenterica*, chronic tubercular peritonitis would produce the same symptoms. Recognition of the latter condition was usually difficult, but in some cases it could be determined with certainty. Of course, in such the prognosis would be fatal; in others uncertain.

DR. FRANCIS DELAFIELD spoke of the frequency with which chronic peritonitis arose for diagnosis, how many mistakes were made concerning it, and of its great importance. He divided the cases into three classes; those in which there were simple adhesions of connective tissue, those in which there were both adhesions and serous or purulent fluid, and the cases in which there was diffused thickening with fluid, but without adhesions. The first

condition was often not detected until the autopsy. When in addition an enlarged liver existed, it was frequently confounded with tubercular peritonitis. Other conditions, from which it was difficult to distinguish this class, were irritable colon and dilated pylorus. The second closely simulated carcinoma and tubercular disease of the peritoneum. The third class was difficult to diagnose, not only from the latter conditions but also from cirrhosis of the liver.

DR. WILLIAM H. THOMPSON spoke of the remarkably low percentage of urea in the urine of patients with cancerous disease, as a point that might sometimes be of diagnostic value.

DR. L. WEBER said that he had never seen a case of chronic peritonitis that was not infectious in character. He did not look upon the cases mentioned by Dr. Jacobi as really cases of chronic, but of acute peritonitis and its results. *Tabes mesenterica*, he believed, was always a tubercular disease.

Stated Meeting, October 17, 1889.

THE PRESIDENT, ALFRED M. LOOMIS, M.D.,
IN THE CHAIR.

DR. LEWIS A. STIMSON read a paper on

GUNSHOT WOUNDS OF THE ABDOMEN, WITH SPECIAL
REFERENCE TO WOUNDS OF THE INTESTINES.

Dr. Stimson said that in upholding laparotomy for gunshot wounds of the abdomen it was not sufficient to show that some patients had survived the operation, nor that in cases operated upon such a procedure alone would have saved life, but it should also be shown that a larger proportion of patients recovered with operation than without. Even this being so, it might still be a question whether the cases to which laparotomy was adapted could be selected from among others in which operative interference was uncalled for, and consequently injurious. The speaker, after mentioning the few cases in which laparotomy had been performed for gunshot wounds of the intestines prior to the introduction of antiseptics, reported three recent cases in his service at the hospital, two of the operations being performed by himself, and one by his house surgeon; the latter patient, in whom there were six perforation of the intestines by a 38-calibre pistol bullet, died forty-eight hours after the operation. In one of his own cases a 32-calibre bullet had made several perforations; the operation, twelve hours later, was promptly followed by death. In his other case the calibre of the bullet was 22, and operation nine hours after the injury was followed by recovery. Four perforations of the intestines were found.

In the Chambers Street Hospital, between 1876 and 1889, there had been treated, without laparotomy, 13 gunshot wounds of the abdomen, with 11 deaths; with laparotomy, 12 cases and 9 deaths. In the New York Hospital had been treated, without operation, 4 cases, with 2 deaths; with operation, one case, which was fatal. At the Roosevelt Hospital, treated, without operation, 6 cases, with 2 deaths; with laparotomy, 3 cases, all of which were fatal. Thus the mortality without operation had been 65 per cent., while with operation it had been 81.2 per cent.

When a bullet penetrated the abdominal cavity, the possibility of its not wounding the viscera was so slight

that it should have no influence on treatment. The symptoms were divided into three classes, namely, those common to all serious injuries, those peculiar to visceral injuries, and those excited by the pathology. Shock, though often extreme, he believed as likely to be emotional as physical.

The speaker opposed rectal injections of hydrogen gas for diagnostic purposes, as it was liable to cause extravasation of feces; and in case of doubt he believed it better to make an exploratory incision. If operative interference was to show superior results, it must be undertaken early, before the bad symptoms following shock had set in. If not done then, it should not be attempted. The argument might be advanced that the patient would die without laparotomy; but since, if delayed, he would be more likely to die with it, its performance could only bring surgery into disrepute.

Dr. Stimson closed with the statement that no rules for interference or non-interference could be drawn, and that the surgeon should be guided by his convictions in each particular case.

DR. J. A. WYETH thought that the question of operation was involved in about as much doubt to-day as it was nine years ago, when Dr. Sims read a paper on the subject before the Academy. He thought one had to be guided by the condition of the patient, situation of the wound, direction and size of the missile. The smaller the bullet the less demand there was for an operation. If the patient when first seen was weak, and there was extravasation of fecal matter, he would simply enlarge the abdominal wound for better drainage.

DR. ROBERT ABBE said that though the view was commonly held that a small bullet entering the abdomen was of less importance than a large one, experience had shown that a calibre of 22 not infrequently made a very large intestinal perforation. He agreed with Dr. Stimson and Dr. Wyeth, that where a number of hours had elapsed after the injury, lymph having formed around the wounds, drainage was all that should be attempted. Earlier, laparotomy should be done. If penetration was doubtful, cocaine or nitrous oxide were safer anesthetics than ether, which caused vomiting. He spoke against immediate anastomosis in resection, and in favor of establishing primarily a fecal fistula. Too little, rather than too much, should be done.

DR. WILLY MEYER mentioned a case in which the bullet, entering the abdominal walls, and passing through the lung, penetrated near to the spinal column, where it could be externally felt. Though there was vomiting of blood, at the laparotomy, some hours after the wound had been inflicted, only the outer coat of the stomach was found injured, the bullet not having penetrated the mucous coat. The patient died, but a post-mortem was not obtained.

DR. B. F. CURTIS thought statistics by one experienced operator might show a higher percentage of recovery than where laparotomy was not done. He preferred chloroform to ether.

DR. THOMAS MANLEY referred to a case which he had already reported, of four perforations of the intestine by a bullet, the operation being followed by recovery. He also mentioned two others without operation, one recovering, the other dying from internal hemorrhage. It had been argued that operation should not be attempted during shock; but he thought that if the operation was

not done then, it should not be done all, for adhesive material was very soon thrown out, and an attempt made by Nature to close the wounds; to disturb the case then would add to the inflammation.

DR. STIMSON said, in answer to Dr. Curtis, that collective experience might be of value in the selection of cases, but that proficiency in operating would have to come from general surgical experience.

CORRESPONDENCE.

LONDON.

(From our Special Correspondent.)

On Medical Education in the United Kingdom.—The methods resorted to by persons desiring to obtain the right to practise medicine in Great Britain, differ so radically from those carried out in other parts of the world, and are so little understood by many Englishmen themselves, that a few words on the subject may not be out of place at a time when Americans seem to be coming more frequently to London for medical training.

Here, when a man chooses the career of a medical practitioner, the first thing to be done is to get his name registered as a medical student; and no medical studies are allowed to be reckoned until this necessary step has been taken. Before he can be registered, the intending student must produce evidence of having passed a preliminary examination in English, Latin, elementary mathematics, and elementary mechanics, and in one optional subject, a choice being given him between Greek, any modern language, botany, or elementary chemistry. This examination is by no means formidable, and many boys pass one that is accepted before leaving school.

The registration is accomplished under the auspices of the General Medical Council, a body charged with the supervision of all matters pertaining to medical education and registration, and the student will have no further official relations with this august body until he presents himself with his diploma or licence to practise, which he must register before he can obtain his full privileges as a duly qualified medical practitioner; before effecting this registration he will have to pay a fee of five guineas (about twenty-six dollars), and he will then, and not until then, be entitled to hold appointments in the public services, sign certificates, and give evidence in the law courts, which an unregistered practitioner, no matter what diplomas or medical degrees he holds, cannot do.

Between the initial and the final registration a period of at least forty-five months must elapse, comprising at least four winter and three summer sessions, and the student must have passed examinations satisfactory to the Medical Council in all the main branches of medical knowledge, and his diploma or licence to practise must entitle him to practise in medicine, surgery, and midwifery. This latter requirement is quite a modern innovation—in fact, it is only of two years' standing. Formerly there were many bodies which could only give what was called a single qualification—*e. g.*, the College of Surgeons, which could only confer upon its members the right to practise surgery. This qualification alone is now not registrable, and, consequently, the College of Surgeons has entered into a combination with the College of Physicians, and the two bodies conduct a joint examination, at the conclusion of which, if successful, the

student will have the necessary double qualification and can have his name placed on the register.

There is abundant scope for choice as to the channel through which the qualifying degree or diploma is to be obtained; the decision is not, however, so difficult as it may seem when looking at the list of institutions, and is probably determined in great measure on personal grounds. The bodies which have the power of giving qualifications may be conveniently divided into two groups, *viz.*, those which are educational as well as examining bodies and those which only examine. To the former group belong most of our universities, in fact all but one. They are, in England, the Universities of Oxford, Cambridge, Durham, and the newly created one in Manchester, the Victoria. Scotland boasts of those of Edinburgh, Aberdeen, St. Andrew's, and Glasgow; whilst Ireland has two, *viz.*, Trinity College, Dublin, and the comparatively modern Queen's University. The licensing bodies which only examine, are, the London University, the Colleges of Physicians and Surgeons, and the Society of Apothecaries, in England. In Scotland there are the Colleges of Physicians and Surgeons in Edinburgh and the Faculty of Physicians and Surgeons in Glasgow; these three bodies have amalgamated to hold a conjoint examination in the same way as those of London; and in Ireland there are the Colleges of Physicians and Surgeons, and the Apothecaries' Hall. I believe that the two latter have arrived at some form of conjoint examination arrangement.

The only portal to our register is through one or other of these examining bodies, so that no foreigner, including thereby any one from one of the colonies, can become a legally recognized practitioner in this country until he has submitted himself to the ordeal of examination at one of the above-mentioned institutions; but having once succeeded in getting his name on the register, he can then register his foreign degree or diploma, if obtained at any recognized university. This is a concession that was only obtained two years ago, when the last Medical Act was passed.

In the case of the Scottish universities it is the rule for a student to spend his whole medical career at his university; but in England this is most unusual. At Oxford it would be almost, if not quite, impossible, and at Cambridge it is almost unknown for a medical student to complete his whole medical career, the custom being for the last two or three years to be spent either in London or at one of the chief provincial medical schools; whilst in the case of those who are not entered at one of the universities mentioned in my first list, the choice of a medical school becomes an imperative necessity. Here, again, he has plenty of choice, as in London there are eleven more or less fully equipped schools, whilst in the provinces he can choose between Manchester, Liverpool, Birmingham, Leeds, Sheffield, and Bristol; in Scotland, Edinburgh and Glasgow, and in Ireland, Dublin, offer facilities for the education of those who are unable or unwilling to enter at one of the universities.

ST. LOUIS.

To the Editor of THE MEDICAL NEWS,

SIR: At this season of the year all are interested to know something of the prospects of the medical col-

leges in the various sections of the country. Here in St. Louis we have four colleges of the regular school of medicine, viz., The Missouri Medical College which was founded by the celebrated Joseph Nash McDowell, and which is now a department of the State University; the St. Louis Medical College, with which was identified in its early years the celebrated Dr. Charles Pope, and later the no less distinguished Dr. John T. Hodgen; the College of Physicians and Surgeons, founded by Dr. Louis Bauer; and last, the Beaumont Medical College, named from the eminent physician whose observations upon Alexis St. Martin have made his name familiar to every student of physiology.

Of these colleges "The Missouri" requires the legal "three years of study and two courses of lectures," and the Dean reports two hundred students as having matriculated this year.

St. John's Hospital is adjoining the college building, and supplies material for clinical lectures, the hospital staff being composed of members of the college faculty. The college building is on the northeast corner of Lucas Avenue and Twenty-second Street.

The St. Louis Medical College is situated much farther down town on the northeast corner of Clark Avenue and Seventh Street.

The faculty of this school have long taken an advanced position with reference to the proper requirements for a medical education, and have for several years past required for graduation an attendance upon three courses of lectures and a preliminary examination of all who cannot offer either a college or high school diploma or a first-grade teacher's certificate. The Mulvanphy hospital on Grand Avenue is under the control of this school and affords a large amount of valuable clinical material.

The number of matriculants reported from this school is sixty.

The Alumni Association has for the last two years been very successful in arousing and keeping the interest of its members. They have each year a course of lectures by eminent scientists and others.

The College of Physicians and Surgeons, situated on the corner of Eleventh and North Market Streets, was organized in 1878, under the leadership of Dr. Louis Bauer. After continuing for some four or five years most of the members of the original faculty resigned and Dr. Bauer reorganized the faculty, and at present the members are mostly men new to professional honors, though several have been prominent in the councils of the St. Louis Medical Society.

One curious feature of the present organization of the faculty is that an ex-president of the St. Louis Medical Society and one who recently narrowly missed achieving that distinction, sit side by side with a member of the profession whose efforts to secure admission to that society were frustrated, largely by the active opposition of the former.

The number of matriculants reported from this school is about one hundred and twenty-five.

It may be of interest to mention that among the first corps of instructors in this college was Dr. P. H. Cronin, whose murder in Chicago a few months ago has attracted so much attention throughout the country.

The youngest of the regular medical schools in our city is the Beaumont Medical College, which has just en-

tered upon its fourth year of lectures, and has been met on the threshold with a great calamity.

The first step taken by the members of the faculty when they effected an organization four years ago was the purchase of a building on Walnut and Sixteenth Streets, which had been erected for a church some years before, but vacated by the congregation. The site selected was an eligible one and by the expenditure of a few thousand dollars the building was admirably adapted to the purposes intended by its new owners.

The school has prospered and graduated three classes.

On Tuesday night, October 8th, the entire building was consumed by fire, together with the museum of pathological and anatomical specimens belonging to Prof. Waldo Briggs, most of which were prepared by himself, and a costly series of wax models valued at several thousand dollars.

When it became known that the Beaumont College building had been burned, the faculties of the St. Louis College and of the College of Physicians and Surgeons, tendered the use of lecture rooms in their buildings until other permanent arrangements could be made. Both of these offers were, however, declined with thanks and the faculty have arranged to deliver their lectures in the building on the corner of Fourteenth Street and Lucas Place, formerly a private residence. New buildings will shortly be erected, but whether on the old site or farther west has not yet been determined.

The number of matriculants enrolled before the fire was between sixty-five and seventy.

Besides the above mentioned regular medical schools there is the "St. Louis Post-Graduate School of Medicine," some of the professors in which are connected with one or other of the graduating schools.

A rumor is afloat that the faculty of the Post-Graduate School of Medicine would be willing to dispose of their handsome building to the faculty of the Beaumont Medical School, but for the opposition of certain members who are also connected with the Missouri school and who object to the location of a rival but two blocks away.

THE RADICAL CURE OF HAY-FEVER.

To the Editor of THE MEDICAL NEWS,

SIR: In your issue of October 12th, your correspondent A. H. L. directs attention to "The Radical Cure of Hay-fever with Chromic Acid."

The article is certainly interesting reading, and the statements of the author inspire one with the conviction that he has made frequent applications of chromic acid, in weaker or stronger solutions, to nearly the entire surface of the nasal passages. What is not at all clear, however, to the careful reader, is upon what basis of accurately observed cases the writer has acquired the right to affirm that he has discovered in the use of chromic acid the radical cure of hay-fever. What the writer of the article has apparently accomplished with chromic acid, has been done, as I believe, with more than one agent by others. I have ameliorated in a marked degree numerous cases of hay-fever by the judicious use of the galvanocautery. There is nothing new about this, since it is the common property of the profession. I have, on several occasions, effected notable and enduring benefit by applications of carbolic acid and glycerine, or carbolic acid and vaseline, to nearly

all parts of attainable nasal mucous membrane. I have never yet had what I have been able to regard as a *permanent* cure of hay-fever, by any topical agent. My own experience at the present time of writing is, I am convinced, the experience of many of the best observers in our profession—among those who are throat specialists.

It seems judicious, therefore, before any method of treatment, especially if it has merely the aspect of novelty, is relied upon to *reduce*, if not *entirely obliterate*,¹ some of the most difficult cases we, as specialists, are called upon to treat, that forthcoming facts should be numerous and followed up carefully during several spring, summer, or autumnal seasons.

Truly yours,

BEVERLEY ROBINSON, M.D.

NEW YORK, October 16, 1889.

AMERICAN PUBLIC HEALTH ASSOCIATION.

(From our Special Correspondent.)

To the Editor of THE MEDICAL NEWS,

SIR: The annual meeting of the American Public Health Association convened on Tuesday, October 22d, at Brooklyn Institute, and probably was the most successful gathering that the Association has ever held. Not only did it bring together representative sanitarians from almost every State of the Union and from Canada, but it also excited general attention throughout the entire country. This was made evident not only by the large number of daily papers which recognized the progress of its proceedings, but also by the unusually great attendance of the public at the general meetings. Owing to the facilities which had been provided by Drs. Raymond and Bell and their associates, everything was favorable to a pleasant and profitable meeting.

The President's Address was worthy of the occasion and of the reputation of its author. After speaking briefly of the increased adoption of sanitary measures, and of the consequent prolongation of life and increase of prosperity, he proceeded to show the social and pecuniary value of preventive and sanitary precautions, quoting from Richardson the actual results which had been attained in England. From these he showed that within a few years the mortality from phthisis has decreased from 12.67 to 9.12 in every 100 deaths; and in zymotic diseases from 23.26 to 20. If the death-rate of New York and Brooklyn were reduced to that of London, it would mean an annual saving of 15,986 lives, not speaking of the vast amount of sickness annually, which is equivalent to 32,000 years. "This lengthening of years, this relief of distress, this saving of public wealth is worth working for."

The address of Mayor Chapin showed an unusual appreciation of the relations of public health to civic and political interests; and following this, the Rev. Dr. Storrs, with his usual eloquence, demonstrated that the American investigator has well nigh reached the precision of research generally claimed for French and German savants.

In the address of President Low, of Columbia College,

¹ The precise words with which A. H. L. terminates his article cannot be conveniently used. The substitution of verbs for nouns will not alter the sense.

some very practical comments on the sanitary needs of Brooklyn in its out-lying districts were made, and Dr. Alexander Hutchins welcomed the delegates in so hearty a manner as to receive many congratulations.

The first paper presented to the Association was on the over-shading of our homes, by Dr. Parker, of Newport, R. I., which, unfortunately, added but little on those points where information is most needed. He was followed by Dr. Hibbard, of Indiana, who read a paper on clothing, enforcing the importance of "hardening," to diminish susceptibility to the changes of temperature. Dr. Jerome Walker, of Brooklyn, read a paper on the causes and prevention of infant mortality. He insisted most strongly upon good ventilation, good nursing, and attention to all sanitary details which do so much toward prolonging infant life. As an evidence that such care is not useless, he mentioned the Brooklyn Institute, in which there were 118 children not two years of age, among whom only six deaths occurred in a year. Mr. Alfred C. White, a civil engineer of Brooklyn, furnished a good paper on the relation of the dwellings of the poor to infant mortality, showing the comparative uselessness of partial measures, and the need of radical changes in tenement-houses. He quoted figures received direct from the Secretary of the Improved Industrial Dwelling Company of London, which show a marked decrease of the death-rate among the lower classes in those who were properly housed. In the discussion which followed, Prof. Bartley, of Brooklyn, was disposed to insist upon the evil effects of bad food as having quite as much to do with disease as bad dwellings. Dr. MacDonald stated that, in his opinion, cholera morbus and other causes of infantile mortality depended chiefly upon alterations in temperature.

The session of the second day was opened by a paper upon the "United States Census in Its Relation to Sanitation," by Surgeon J. C. Billings, of the United States Army, who showed the necessity of such an enumeration of population as would give the social condition and occupation of each individual, thereby admitting of a comparison of various districts. Thus, in the case of large cities, deaths occurring in hospitals should be referred to the districts in which they belong and not to the district in which they actually occur, the nationality and birth-place should also be given. In the case of deaths of colored persons the degree of admixture of white blood should be stated. Dr. Billings was followed by Dr. Hunt, of New Jersey, who read a paper upon the prevention of phthisis pulmonalis. Dr. Playter, of Ottawa, then read one upon the prevention and restriction of tuberculosis in man, and Dr. Kretschmar presented one upon the prevention of pulmonary consumption. The paper of Dr. Hunt claimed that while certain facts as to the bacillus of tuberculosis were established, the proof of the communicability from man to man by inhalation requires investigation. The paper of Dr. Playter adopted the views of Cornet and advocated extreme measures for the restriction of the disease. In the third paper it was pointed out by Dr. Kretschmar that in ten per cent. of phthisis cases no bacilli were found. In the discussion which followed Dr. Billings said he thought the first paper threw too much doubt upon the conclusions of certain well-known investigations and asserted that in his opinion the necessities of public health require stringent regulations.

The afternoon session was held at the Hoagland Laboratory, which is admirably fitted up for biological and microscopical investigations. During this session a resolution was passed urging the importance of care in respect to the disinfection of diseased sputa.

The second evening was very profitably occupied with papers on "The Art of Cooking," by Edward Atkinson, LL.D., of Boston; on "Recent Researches Relating to the Etiology of Yellow Fever," by Surgeon George M. Sternberg, U. S. A.; a paper on "Pulmonary Observations on the Microorganism of Texas Fever," by Dr. Theobald Smith, Assistant in the Laboratory of the Bureau of Animal Industry, Washington; and another by Dr. D. E. Salomon, Chief of the Bureau, on "Some General Observations on Texas Fever." Dr. Atkinson, with his large fund of information and with simple utensils illustrated the economics of cookery and showed how much is yet to be done for economy and the betterment of health. Dr. Sternberg gave an interesting account of his recent researches on yellow fever which he illustrated by means of the stereopticon. The papers on Texas fever were also well illustrated and the subjects attractively presented by the authors. It is certainly a disease with marked peculiarities and very evidently dependent upon a special microorganism, but its relation to anthrax is as yet indefinite.

On the third day Dr. Benjamin Lee, of the State Board of Health of Pennsylvania, read a paper on the "Annexation of Cuba as a Sanitary Measure," and Dr. S. W. Latta, of Trenton, one on "Railway Sanitation." During the general meeting resolutions were adopted looking toward a representation in future of all the American nations. An encouraging sign was the initiation of a large number of new members. Dr. H. B. Baker, of Michigan, was elected President. The next annual meeting is to be held at Charleston, S. C.

NEWS ITEMS.

Polyclinic Therapeutical Society.—At the last meeting of the Polyclinic Medical Society, a therapeutical section was formed from among the faculty, clinical assistants, and students of the Philadelphia Polyclinic, the object of which shall be the scientific and systematic investigation of the action of drugs and remedies in the cure of disease. The executive committee of this section formulates a programme of practical work for each meeting, decides what drugs or remedies are to be investigated during the following months, devises specific directions in regard to such investigations, and supplies printed blank forms to carry the work into practical effect, with which any member of the profession, who desires to take part in the research, will be furnished free on application. These blank forms are filled out by the observer and returned as soon as the investigation is completed, which will be at the end of one, two, or three months; at which time the reports will be analyzed and presented at the following meeting with due credit to each contributor, results being published in the medical journals. It is believed that a combined effort of this kind will not only benefit those who are engaged in the work, but will be of great value to practical therapeutics.

Dr. Mays read a paper on *Olive Oil in Gall-stones*, and olive oil in this affection was made a subject for in-

vestigation during the next two months. All communications in reference to this subject should be addressed to Therapeutical Section, Philadelphia Polyclinic.

ACCORDING to the *Maryland Medical Journal*, New York city employs and pays forty physicians to visit the poor in the tenement houses. This is an improvement over the usual forms of charity.

Sterilized Milk Delivered to Patients in their Dwellings.—Since August 1st, sterilized milk has been furnished to children under treatment at the Philadelphia Polyclinic. The milk is sterilized by the Visiting Nurse Society of Philadelphia, and taken to the child by the nurse in attendance, in the bottles in which it is prepared. Milk and bottles are furnished the parents at cost. The results have been excellent.

The Hudson River State Hospital.—The New York State Hospital, at Poughkeepsie, has received an appropriation of \$40,000, with which to build additional accommodations for the resident staff and one ward for the isolation of infectious or suspicious cases.

Diphtheria in Central Illinois.—A dispatch from Chicago states that the public schools at Illiopolis have been ordered closed on account of the prevalence of diphtheria, from which there have been several deaths. The disease has been reported from several other points in central Illinois.

Accident to a Physician.—DR. A. A. CLOUGH, of Denver, Colorado, who has been east to attend the Convention of the Public Health Association, on Sunday last, while walking in the streets of New York, was taken suddenly ill with vertigo, and, falling heavily, suffered concussion of the brain. He was conveyed to Bellevue Hospital.

Foreign Necrology.—DR. LIEDESDORF, the eminent alienist of Vienna, is dead.

DR. PHILIPPE RICORD, of Paris, the authority in venereal affections for fifty years, died on the 22d inst.

DR. IRA HAWLEY BARTHOLOMEW, of Lansing, Mich., died on the 18th instant, at the age of sixty-one years. He was, in 1871, the President of his State Medical Society, and thrice the Mayor of his city, besides holding responsible pension offices under the general government.

Another Continental Anglo-American Society.—In THE NEWS for the 19th ult. an item was published on the Society, in Paris, of English and American physicians. A somewhat similar organization has been begun at Vienna to promote the interests of the English-speaking physicians, who resort to the University in considerable numbers; there were over one hundred American physicians enrolled there last year. It will be named the Anglo-American Vienna Medical Association.

THE American Public Health Association adjourned on the 25th inst., after a successful and interesting meeting.

Suicide of a Physician.—DR. J. A. SHANNON, a practitioner of Canandaigua, New York, was put under arrest

on account of running over a pedestrian, for which he was in part responsible. Filled with alarm and chagrin at the catastrophe, he took some morphine; the amount taken was an overdose, and death ensued. The injured person is said not to have been seriously hurt.

The Bishop Case.—According to the *New York Medical Journal* the board of trustees of the Society of Medical Jurisprudence and State Medicine has taken action that has resulted in the passage of a resolution by the society expressive of sympathy with the medical men under indictment for the part taken by them in the post-mortem examination of the late Dr. Bishop. We are sure that they have the sympathy of the entire profession also. Their action was at most only a technical offense, and the trouble that has already come upon them in consequence of it undoubtedly constitutes as much punishment as any fair-minded citizen would wish to see inflicted on them. We think, therefore, that their further prosecution might be stopped without any disadvantage to the public welfare.

A Report on Cigarettes.—Mr. Willis G. Tucker, in his report to the New York State Board of Health, on the result of his examination of various popular brands of cigarettes, says that careful analysis of tobacco and paper failed to reveal any poisonous ingredients, other than the tobacco itself, and that most cigarettes contain pure tobacco and good paper. The evils of cigarette smoking are due to the fact that cigarettes are cheap, convenient, and can be used in large and excessive quantities, that the smoke is usually inhaled, and that children and immature persons so freely use them.—*Columbus Medical Journal*.

A Dealer in Fraudulent Diplomas.—We learn from the *New York Medical Journal* that the arrest of "Dr." Henry Freeland, the alleged head of seven bogus medical colleges, took place in Maine October 2d. He is to be tried at Portsmouth, N. H. It is not known how long this diploma-mill had been working before its exposure was published in one of the Boston papers, but one of the fraudulent diplomas is known to have been issued early in 1888. The buyers of diplomas were charged from \$50 to \$300. It is a partial compensation to note that these frauds are brought to book more speedily than was formerly the case; but even now the punishment that will be visited upon this dealer in diplomas—if he is punished—will be only that for an illegal use of the mail, rather than for a crime against his dupes or the public at large. In other words, the General Government must be invited to intervene and prosecute the accused for an act which is not, or might not be, essential to the carrying on of an extensive business in fraudulent credentials. The truth is that comparatively few States have any laws that are competent to the punishment of this kind of iniquity; and this shrewd indirection about the "illegal use of the mail" is a decidedly fortunate circumstance for some of them.

WE understand that the Faculty of the College of Physicians and Surgeons of New York have decided to raise the tuition fee from \$150 to \$200 a year. It seems to us that this is highly proper. By means of such a

change the residents will be given facilities for learning which only a large tuition fee can cover. Further than this, examination of the catalogues of several of the other technical teaching bodies, such as the School of Mines of Columbia College, charge \$200, though the expenses of the course are far greater in a medical school than in such an institution. We doubt if any branch of teaching requires more skill and study than that necessary to the thorough medical lecturer, nor one which of necessity forces him to keep abreast of the times so constantly, yet the fees charged and the salaries paid are in many institutions exceedingly small. As long as the teaching bodies of this country are not endowed, it is but fair that they should receive a *quid pro quo* equal to their deserts. So far as we know, the Medical School of Harvard University is at present the only institution charging \$200 a year in the country.

A Truly Woman's Hospital.—We learn that under the patronage of the Princess of Wales London is to have still one more hospital, which is, however, to differ very materially from those heretofore founded. Not only are all the patients to be women, but all the physicians, surgeons, and apothecaries connected with the establishment are to be of the softer sex.

Medical Students in Germany.—The *Buffalo Medical and Surgical Journal* states that the number of students attending the medical schools of Germany has increased to such an extent in the past few years, that the Government has been petitioned to open new schools of medicine. The Government refuses to do this, but proposes to remedy the evil by exacting higher tuition fees, and lengthening the course of study required for graduation.

"Flint Disease."—A pulmonary affection peculiar to those who work in quarries received the attention of Dr. Forwood in his address before the Medical and Chirurgical Faculty of Maryland at a recent meeting of that body. He claims that it is frequent and fatal among the quarrymen in Hanford County. Few escape permanent damage to the lungs if they are engaged in the quarries even for one year.—*Memphis Journal of the Medical Sciences*.

Rabies.—The number of dogs in England officially reported during the week ending September 28th, as afflicted with rabies, was eight, against six in the previous week; of these, six were killed and two died. The distribution was as follows: Middlesex (excluding London), three; Surrey (excluding London), two; and Chester, Hertford, and York (West Riding), one each. No cases were reported from London proper.

THE MEDICAL NEWS will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.

Local papers containing reports or news items should be marked. Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the **NEWS** should be addressed to No. 1004 Walnut Street, Philadelphia.